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Colony of Fiji

**ANNUAL REPORT**

**OF THE**

**MEDICAL DEPARTMENT**

**FOR THE YEAR**

**1958**



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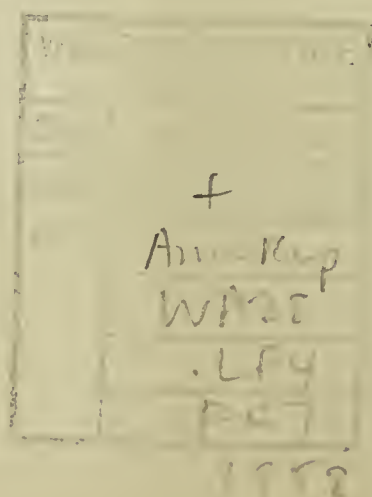


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## MEDICAL DEPARTMENT

(ANNUAL REPORT FOR 1958)

### I—GENERAL REVIEW

BROADLY the functions of a Government Medical Service are twofold; the organization and maintenance of curative services, in the form of hospitals, dispensaries and a variety of clinics where those who have fallen sick may receive treatment and the provision of public health services designed to prevent, where possible, the entry and/or spread of disease. The concept of these latter services has, however, changed to some extent over the years from that of mere prevention and has taken on a more positive attitude to health. Thus in addition to the improvement of sanitary services such as sewerage and refuse disposal, purification of water supplies, vermin and insect control, etc., the trend in public education in this respect is to teach how a healthy mind and body may be developed which can not only withstand disease, but derive the greatest benefits from what life has to offer.

2. Man is an individual with his own personal aspirations, habits and way of life, but he is also a member of society and must, within certain limits, conform to the customs and requirements of the social group within which he lives. It is, therefore, apparent that if a more positive approach to health is to be achieved and avoidance of preventable disease is to become a reality, the doctor, nurse and health worker cannot expect lasting or even effective temporary results if their efforts are confined within the walls of their professional and technical knowledge. It is essential that the assistance of the school teacher, priest, administrator, anthropologist and, in fact, all those engaged in work connected with the humanities and society, be sought, and used in the public welfare.

3. Any plan of health education must be long-term and the teaching, while being as simple and interesting as possible, should nevertheless be repetitive. It is from parents and later at school, that the child learns the habits of hygiene which will influence him throughout life and once acquired any faults will be difficult to eradicate. Thus adult as well as child education is necessary, and every known medium brought into use; press, radio, cinema, lectures, posters, and use must be made of the family circle, church, school room, women's committee, dispensary, child welfare clinic, and of any occasion when a group of people are gathered together in discursive mood.

4. It is, of course, essential that the curative and preventive medical services be closely integrated and wherever possible the same individual should be responsible for the treatment of the sick and for leadership in public health measures and health education, at least in so far as village communities are concerned. It is through their skill to treat and nurse the sick that doctors and nurses gain respect and confidence and thus make the community receptive to advice given on how sickness can be prevented. It is even possible that they may be able to give the lead by example and teaching and demonstrate that harmony of bodily and mental function which gives rise to positive health and not merely absence of disease.

5. During the year some progress has been made in developing public health services and health education. This has not, however, been as rapid as had been hoped owing to the unavoidable diversion of key staff to other work of an urgent nature and the delays which seem inevitable in the first stages of any policy changes. Nevertheless a definite start has been made in the reorientation of the training of A.M.Os and ancillary staff. The building of the Nuffield Department of Preventive and Social Medicine as a part of the Central Medical School, was started at the end of the year and this Department should be functioning fully before the middle of 1959. There was a definite increase in health propaganda in the form of radio talks, press articles, lectures and group discussions, and a number of posters and booklets have been produced for distribution. Liaison has been maintained with the Education Department and particularly with the staff of the Teachers' Training College, where hygiene and sanitation courses are included in the curriculum. There can be little doubt that many sections of the public are eager to learn and results can be achieved if knowledge is disseminated in a simple form and means can be found to implement the advice given cheaply and in a practical manner.

6. The notable feature of the year, affecting the public health, was the poliomyelitis epidemic which struck the Colony in mid-July and continued until early November. It must be admitted that this epidemic was unforeseen as it had been assumed, not without considerable supporting evidence, that there was a reasonably high degree of immunity to the disease amongst the population. The fact that poliomyelitis has occurred in Fiji in sporadic form for a great number of years is beyond dispute and, under the conditions of sanitation existing in rural and not a few urban areas, it was concluded that the immunity to the disease, acquired in infancy, must be considerable. While this hypothesis was correct enough and has since received support from laboratory tests, it appears that the unaccountable had happened and for some reason unknown, one of the three identifiable viruses which cause the disease had died out some 7–8 years ago, thus leaving the young of this age group vulnerable. This virus (Type I) was then re-introduced, presumably by some visitor, and the result was explosive. Of the paralytic cases that occurred, 75 per cent were 7 years of age or



younger, and if the number of cases of non-paralytic form is included the percentage is even higher. The number of cases in the 8-21 years age group was relatively low and it must be concluded that those over 20 years who were affected (11.5%) had either lived in conditions where they had never encountered the disease or had acquired immunity in infancy and childhood but had lost it over the passage of time. Fuller details of the epidemic are given later in this report, but the opportunity is taken here to express very sincere appreciation for the assistance and donations given by the New Zealand Red Cross, the Fiji Branch of the British Red Cross Society and a large number of individuals, also to the Royal New Zealand Air Force for the loan of apparatus and to the New Zealand Department of Health for the loan of apparatus and recruitment and release of physiotherapists.

7. Of the other notifiable diseases, 11,626 cases of influenza were reported, but it is probable that this figure includes a number of other conditions such as non-paralytic poliomyelitis and a variety of other virus infections including the common cold. There was certainly no clear cut epidemic such as occurred in the previous year with the Asian variant of the A virus. The number of cases of whooping cough notified showed a sharp increase, 1,000 as against 261 in 1957, but the disease seems to have been relatively mild. There was a small increase in the number of cases of diphtheria and a marked increase in the incidence of tetanus, and parents are again urged to see that their children are immunized against these three lethal but preventable diseases. The inoculations are combined in one as "triple antigen" and are freely available. The increase in the number of cases of infective hepatitis (infective jaundice) noted last year was maintained and it is now clear that the greater number of cases notified has a statistical significance and the disease is more prevalent than previously. There was a mild outbreak of mumps and some increase in chicken-pox, but the incidence of measles was negligible.

8. Although more detailed information on tuberculosis, leprosy, yaws and venereal disease is given later in this report, the importance of these diseases is such that they should be mentioned in this review. The B.C.G. vaccination programme commenced, as planned in June but in August, it had to be stopped *force majeure* owing to the poliomyelitis epidemic. Despite this, however, 12,000 persons were tested and those susceptible vaccinated; the programme was re-commenced before the end of the year. The plans for extensions to the Tamavua Tuberculosis Hospital have been prepared and tenders called for; building will commence early in the new year. In addition, a considerable amount of information on tuberculosis control was disseminated by radio, press and pamphlet and there was a marked increase of in-service training of staff.

9. The leprosy situation has not changed materially during the year except that the population of Makogai has been further depleted by the return of a number of patients to their parent territories; a policy which will continue during the forthcoming year. The smaller the number of cases on Makogai, the easier it will be to trace back on contacts and the greater the chance of eventual elimination of the disease.

10. The yaws control campaign, although successful in reducing the disease to minimal proportions, will not be complete until the disease is eradicated. No complacency can be allowed and it is essential that every case found be notified and appropriate treatment given not only to the patient but the contacts. In so far as notification of cases is concerned, the situation in regard to venereal disease does not appear to have altered materially since last year and there was in fact, a decline in the number of cases of both gonorrhoea and syphilis recorded. Full reliance cannot, however, be placed on these figures as, owing to the stigma attached to these diseases, notification may be avoided in certain cases and others may receive treatment from unqualified practitioners. A careful watch must be kept on the situation as with the diminution in yaws, which disease gave immunity to syphilis, the next generation of Fijians will be vulnerable to the latter disease and further, it has been found in many parts of the world that the causative organism of gonorrhoea has now developed resistance to penicillin.

11. Although hygiene and sanitation, both in urban and rural areas, remain, in general, unsatisfactory, the authorities, particularly in urban areas, are conscious of the defects and are taking steps, where possible, to rectify matters. Surveys are being carried out in the Suva and Lautoka areas as a step towards improved sewerage disposal and storm water drainage and the establishment of a Housing Authority to plan and stimulate low cost housing schemes is a marked step forward. Standards of village hygiene in many areas are appallingly low which when coupled with a lack of awareness on the part of the population that this is so, gives a further clear indication of the need for health education. If hygiene is to improve, it must be through the co-operation of the people; food handling standards can only be raised if the public demands and insists upon improvement and the disgusting habit of spitting, which is a widespread cause of disease, will only cease when public opinion condemns it.

12. The Colonial War Memorial Hospital, Suva, continued to fulfill its triple role as specialist centre of the Colony, training hospital for A.M.Os and Nurses and divisional hospital for the central division. The Medical Superintendent, who is also Physician Specialist, with the close co-operation of all members of his staff continued to effect many improvements to the hospital, both in respect of amenities and overall organization. The hospital now enjoys a high reputation not only within the Colony but also further afield. During the year, the Royal College of Surgeons of England agreed to recognize the hospital in respect of house appointments required of candidates taking the Fellowship examination. In June, the staff with co-operation of certain leading citizens organized a Hospital Week in Suva, during which over £4,000 were collected to provide amenities. This is likely to become an annual event. Dr. D. J. Oldmeadow, who had given sterling service as honorary consulting Obstetrician to the hospital for a number of years, left the Colony in November and will be sadly missed. It has been necessary to create the post of Obstetrician/Gynaecologist on a wholetime basis to replace him and an appointment is expected shortly.



13. Work at the Lautoka, Labasa and Levuka divisional hospitals continued at full pressure and the staff of these, in particular, had to bear the additional burden of the poliomyelitis epidemic which was felt most severely in the Suva and Lautoka areas. The Lautoka hospital, as has been stated before, is of out-dated design, is in poor repair and lacks many facilities; it is, therefore, all the more to the credit of the staff that they met the emergency admirably. The staff of this hospital was strengthened at the end of the year by the appointment of a Surgeon.

14. The fourteen rural hospitals continued to fulfill the useful function of providing bed accommodation for the sick in outlying areas and relieving pressure on the divisional hospitals. The number of dispensaries remained at 44. All these rural hospitals and dispensaries, with the exception of that at Waiyevo, where a Medical Officer is stationed, are in the charge of an A.M.O. These men and women are responsible for the day to day care of the sick in their area and are assisted by locally trained Nurses. There is, however, a growing awareness on their part that more preventive medicine is required and this change of outlook is being developed and encouraged.

15. Separate sections of this report are devoted to the work carried out at the special hospitals—Tamavua Tuberculosis Hospital, Makogai Leprosy Hospital and settlement and the Mental Hospital, Suva, and thus no further reference will be made to them in this review other than to congratulate and thank the staff for the work achieved during the year.

16. The Dental Division of the Department extended its sphere of activities to some extent during 1958 by the acquisition of a mobile dental unit purchased from funds made available as an annual grant by the Colonial Sugar Refining Company. This unit will tour schools in Viti Levu. The work of the division in general, is directed at child dentistry and marked emphasis is laid on dental health education. A full set of excellent posters designed by the Senior Dental Officer was prepared during the year with the kind co-operation of the South Pacific Commission. The scheme to provide low cost toothbrushes to school children also continued with success.

17. Training activities, both pre- and in-service, were maintained and apart from training of A.M.Os, A.D.Os and Nurses, courses continued for Assistant Health Inspectors, Assistant Radiographers, Assistant Pharmacists, Laboratory Technicians and Assistant Dietitian/Housekeepers. At the Central Medical School building commenced on the new Department of Preventive and Social Medicine, funds for which have been provided by the Nuffield Foundation. The Foundation has given a grant of £20,000 to establish and maintain this Department for a period of three years after which it will become a Government responsibility. A Medical Officer was seconded to the School as whole-time lecturer in Public Health at the end of the year.

18. In August, the Council of the Assistant Medical Officers' Association organized a most successful seminar in Suva at which tuberculosis control was selected as the subject for discussion. Twenty-four A.M.Os attended the meetings which were held over a period of four days and during which Professor Heaf, Advisor in Tuberculosis to the Secretary of State, addressed the delegates.

19. Family planning clinics were established at the Colonial War Memorial Hospital, Suva, and the Government hospitals at Lautoka and Labasa, and it is proposed to extend this service to other centres of population in the Colony in the near future. The attendance at these clinics gave a clear indication that there is a public need for advice on family spacing, sub-fertility and general marriage guidance. Notices as to the day, time and place at which advice can be obtained were displayed in out-patients departments, dispensaries and child welfare clinics. Wider publicity will be given as time goes on, but the less direct approach has been effective.

20. The year has not been an easy one. The poliomyelitis epidemic added greatly to the strain placed on doctors and nurses, already over-worked. In addition, the financial difficulties of the Colony during the closing months of the year gave rise inevitably to feelings of frustration, particularly as it was made clear that the social services would be the first to feel the pinch in future economies. It is, therefore, with even greater than usual appreciation that I would like to express my gratitude to all members of the staff of the department for the high standard of service which they have given and maintained and for their continued loyalty.

## II—ADMINISTRATION

### ESTABLISHMENT AND STAFF

21. The Departmental establishment is shown as Appendix I to this report.

22. *Medical Directorate*—Dr. W. H. McDonald, M.B.E. (Mil.), Deputy Director of Medical Services, returned from vacation and study leave in August. He had been successful in obtaining his D.P.H.

Dr. W. L. I. Verrier, Senior Medical Officer, acted as Deputy Director of Medical Services during Dr. McDonald's absence.

Mr. J. H. Gale was appointed Departmental Secretary in July.

Mr. L. W. Wendt was appointed Departmental Accountant in September.

23. *Senior Staff Changes, Appointments, Transfers, etc.*—Mr. J. M. Foreman, F.R.C.S. was appointed Surgeon in December and posted to Lautoka.

Dr. W. G. MacIntosh proceeded on study/vacation leave in September to take a course leading to the Diploma in Clinical Pathology.



Dr. J. L. M. de Beaux proceeded on study/vacation leave in December to take a course leading to the Fellowship of the Royal College of Surgeons of England.

Dr. P. W. E. Downes proceeded on study/vacation leave in March to take a course leading to the Diploma in Ophthalmology.

Dr. E. T. Cusick resigned from the Service in April.

Drs. M. A. R. Eslick, H. R. Simons, H. N. Williams, A. E. Crossley and C. Parker were appointed as Medical Officers during the year.

#### LEGISLATION

24. Legislation of medical interest was as follows:—

1958—Legal Notice No. 13, amends the Prison Regulations.

1958—Legal Notice No. 25, approves various drugs for the purposes of free entry under Customs Ordinance.

1958—Legal Notice No. 48, amends the charges for Quarantine and Port Health Services.

1958—Legal Notice No. 61—Air Navigation Regulations—includes a section on the medical requirements for the persons concerned.

1958—Legal Notice No. 76, amends the Public Hospitals and Dispensaries Regulations, 1955.

1958—Legal Notice No. 87, restricted the entry of persons to Rotuma,

1958—Legal Notice No. 105, approves various drugs for the purposes of free entry under Customs Ordinances.

1958—Legal Notice No. 109, amends the Nurses and Midwives Rules.

1958—Legal Notice No. 113, amends the Fiji Military Forces Regulations in respect of the Fiji Army Medical Corps.

1958—Legal Notice No. 114, amends the Third Schedule of the Pharmacy and Poisons Ordinance.

1958—Legal Notice No. 115, amends the Poisons Regulations.

1958—Legal Notice No. 124, approves various drugs for the purposes of free entry under Customs Ordinance.

1958—Legal Notice No. 125, defines the Rural Sanitary Districts.

1958—Legal Notice No. 130, revokes Legal Notice 87.

1958—Legal Notice No. 147, amends the Public Hospitals and Dispensaries Regulations, 1955.

#### FINANCE

25. Expenditure for the year 1958—General District and Special Hospitals:—

Salaries of Medical Officers	..	..	..	..	..	£29,591
Salaries of Assistant Medical Officers	..	..	..	..	..	20,185
Salaries of Laboratory Staff	..	..	..	..	..	9,532
Salaries of Nursing Staff	..	..	..	..	..	63,055
Salaries of X-Ray Staff	..	..	..	..	..	2,069
Salaries of Clerical Staff	..	..	..	..	..	10,381
Salaries of Dental Staff	..	..	..	..	..	9,286
Wages of Subordinate Staff	..	..	..	..	..	62,751
Rations	..	..	..	..	..	85,343
Power, Heat Light, Water and Refrigeration	..	..	..	..	..	3,988
X-Ray services	..	..	..	..	..	1,555
Laundry	..	..	..	..	..	2,540
Occupational Therapy	..	..	..	..	..	31
Workshop	..	..	..	..	..	33
Hospital Paupers' Burials	..	..	..	..	..	16
General Maintenance, Stores and Incidentals	..	..	..	..	..	5,798
Drugs, Instruments and Appliances	..	..	..	..	..	43,236
Bedding, Clothing and Equipment	..	..	..	..	..	14,791
Books and Periodicals	..	..	..	..	..	161
Total	..	..	..	..	..	£364,342

26. Expenditure for the year 1958—Rural Hospitals and Dispensaries:—

Salaries of Medical Officers	..	..	..	..	..	£1,542
Salaries of Assistant Medical Officers	..	..	..	..	..	41,638
Salaries of Nursing Staff	..	..	..	..	..	45,072
Salaries of Clerical Staff	..	..	..	..	..	312
Wages of Subordinate Staff	..	..	..	..	..	14,680
Rations	..	..	..	..	..	13,143
General Upkeep, Stores and Maintenance	..	..	..	..	..	3,745
Hospital Paupers' Burials	..	..	..	..	..	11
Drugs, Instruments and Appliances	..	..	..	..	..	11,346
Bedding, Clothing and Equipment	..	..	..	..	..	1,859
Total	..	..	..	..	..	£133,348



## 27. Medical Stores and Equipment—Value of issues to nearest £:—

	<i>Drugs and Instruments</i>	<i>Clothing and Bedding</i>	<i>Total</i>
	£	£	£
Cash Sales .. .. .	10	....	10
Private Accounts .. .. .	151	....	151
Special Hospitals .. .. .	6,371	4,493	10,864
General Hospitals .. .. .	36,865	10,298	47,163
Rural Hospitals .. .. .	5,812	1,735	7,547
Dispensaries .. .. .	5,534	124	5,658
Health Sisters .. .. .	2,326	348	2,674
Child Welfare Nurses .. .. .	2,420	312	2,732
Missions .. .. .	38	....	38
Other Medical .. .. .	146	180	326
Other Departments .. .. .	1,357	99	1,456
Total ..	£61,030	£17,589	£78,619

## 28. Revenue and Expenditure of the Department:—

	1956	1957	1958
	£	£	£
Gross Expenditure .. .. .	804,295	852,119	901,754
Revenue .. .. .	84,860	83,961	78,169
Nett Expenditure .. .. .	719,455	768,158	823,585
Percentage of Colony's Expenditure .. .. .	11 per cent	11.62 per cent	10 per cent
Expenditure per head of population	40s. 2d.	42s. 7d.	44s. 0d.

These figures include revenue and expenditure of the South Pacific Health Service.

<i>Year</i>	<i>Total Population</i>	<i>Expenditure per head</i>
1949 .. .. .	284,955	25s. 0d.
1950 .. .. .	293,764	27s. 2d.
1951 .. .. .	301,959	32s. 10d.
1952 .. .. .	312,678	36s. 7d.
1953 .. .. .	320,801	38s. 8d.
1954 .. .. .	333,389	36s. 9d.
1955 .. .. .	345,164	36s. 3d.
1956 .. .. .	357,881	40s. 2d.
1957 .. .. .	361,038	42s. 7d.
1958 .. .. .	374,284	44s. 0d.

29. The above table shows the expenditure on Medical and Health Services per head of the population over the past 10 years.

## COLONIAL DEVELOPMENT AND WELFARE PROJECTS

30. *Filariasis Research*—Mr. G. F. Burnett, Entomologist of Her Majesty's Overseas Research Service continued his investigations into filariasis and mosquito control. The main lines of research are now connected with the use of insecticides in mosquito control and the use of hetrazan in the control of filariasis. Mr. C. B. Symes' report on the Natural History of Human Filariasis in Fiji is now in print and will be available for distribution shortly.

## INTERNATIONAL AGENCIES

31. *World Health Organization*—Two students, Jimione Samisoni and Joji Guivalu, who were awarded W.H.O. fellowships to study physiology and biology respectively at Otago University, made satisfactory progress. It is hoped that they will take up posts as lecturers at the Central Medical School on completion of their courses. A fellowship was also made available to Salim Baksh to study Medical Librarianship for six months in Sydney. The training he received has been most valuable.

32. *China Medical Board*—The China Medical Board, a body affiliated to the Rockefeller Foundation, made two fellowships available; one to A.M.O. Ram Singh Tulsi to study anatomy for one year at Otago University, and the other to Manek Lal Vithal to continue his study of physics at the same University. A.M.O. Ram Singh Tulsi returned to his post as Assistant Lecturer in Anatomy at the Central Medical School at the end of the year, having benefited greatly from his course. Both fellowships were administered by the W.H.O. on behalf of the China Medical Board.

33. *Central Medical School*—The World Health Organization continued to make available two lecturers at the Central Medical School, the one in biology and the other in physiology. It is hoped that this most welcome assistance will continue until local men undergoing University training return to Fiji to take over their work. Some valuable laboratory equipment was also provided by the Organization.



34. *Conferences and Seminars*—The Medical Superintendent of the Leprosy Settlement on Makogai, Dr. D. W. Beckett, attended, in November, the W.H.O. Inter-regional Leprosy Conference in Tokyo, this was preceded by the 7th International Congress on Leprology. Much useful information was obtained. Two Assistant Health Inspectors attended a seminar at Port Moresby on environmental sanitation, also organized by the W.H.O. The Director of Medical Services, Dr. P. W. Dill-Russell, led the United Kingdom delegation at the 9th Session of the Western Pacific Regional Committee in Manila in September.

35. *Yaws Campaign*—The international team re-visited Fiji during the first quarter of the year and carried out a survey in the Nadroga and Navosa Province. The full-scale campaign is now complete, but follow-up of any cases found continues and a yaws survey forms part of the assignment of the B.C.G. vaccination teams.

36. *South Pacific Commission*—Close liaison with the South Pacific Commission was maintained and Dr. Massal, the Executive Officer for Health, visited Fiji for discussions during the year. The Commission organized a Conference in Pago Pago on Tuberculosis in November at which a number of high ranking specialists met to consider the problems of control confronting workers in the Pacific and much useful information was obtained. Dr. G. D. Murphy, Medical Superintendent of the Tuberculosis Hospital, Tamavua, represented Fiji.

### III—PUBLIC HEALTH

#### ORGANIZATION

37. The public health activities of the Government Medical Services are organized and directed by the Director of Medical Services as head of the Medical Department. He is assisted at his headquarters by a Deputy Director of Medical Services, Administrative Secretary, Accountant, Nursing Superintendent, Senior Medical Officer in charge of records and statistics, Chief Health Inspector and clerical staff. For administrative purposes, the Colony is divided into four medical divisions, corresponding with the general administrative divisions, and each is in the charge of a Divisional Medical Officer who is responsible for the organization of the curative and preventive services in his area. He controls the work of junior Medical Officers, Assistant Medical Officers, Health Inspectors, Assistant Health Inspectors, Health Sisters, Nurses and other medical auxiliaries in his division. A conference of Divisional Medical Officers, under the chairmanship of the Director of Medical Services, is arranged once or twice a year to decide upon policy and to co-ordinate activities.

#### COMMUNICABLE DISEASES

38. The trends in certain notifiable diseases in the last six years is shown in the following table:—

	1953	1954	1955	1956	1957	1958
Dengue .. .. .	60	72	36	38	12	8
Dysentery (all forms) ..	243	244	143	231	233	163
Enteric Group .. .. .	35	13	26	14	25	29
Infantile Diarrhoea ..	2,197	1,527	1,542	2,369	2,117	1,991
Pertussis .. .. .	245	422	627	471	261	1,000
Influenza .. .. .	3,197	8,492	5,437	5,710	12,190	11,626
Measles .. .. .	3,179	7	9	12	7,066	15
Poliomyelitis .. .. .	....	....	14	....	6	328
Infective Hepatitis ..	29	45	53	63	123	279
*Tuberculosis .. .. .	498	489	745	610	654	721
*Leprosy .. .. .	40	26	36	40	44	39
Gonorrhoea .. .. .	220	211	322	299	375	335
Syphilis .. .. .	23	12	48	15	26	10
Yaws .. .. .	....	....	....	519	159	135
Tetanus .. .. .	33	45	37	38	38	56

\*These figures are obtained from the Central Registry and not from notification records as those from the Registry are considered to be more accurate. A full table of notifiable diseases is given at Appendix XII. Certain of these notifiable diseases deserve special mention:—

39. *Poliomyelitis*—The epidemic started in July and spread rapidly throughout the Suva/Nausori area, in August it had extended to the Lautoka/Nadi/Ba area and in September/October a relatively small number of cases occurred in Labasa. Although concentrated in epidemic form in these areas, the disease was widespread over the Colony and cases were notified from many islands in the Lau group, even from the most southerly, Ono-i-Lau. Cases were reported also from Savusavu, Nabouwalu (Bua), Taveuni and Kadavu. No cases occurred on Rotuma or Makogai. It is, of course, impossible to give accurate figures of the total number of persons who suffered from the disease owing to the mildness of symptoms and difficulties of diagnosis in certain non-paralytic cases. Furthermore, with large area involved and slow communications from certain districts, the returns issued through the Epidemiological Service and to the press included only those cases which had been notified as occurring during the period reviewed. If notifications were received from remote areas of cases which had occurred some time before these were not included in the running total as this would have given a false picture of the course of the epidemic, but



they were added to the final tally. It seems probable, however, following check and re-check, that the figure of 328 persons who suffered some degree of paralysis either transient or persisting is reasonably accurate. The racial distribution was:—

Fijians	..	..	..	..	32%
Indians	..	..	..	..	54%
Europeans and part Europeans	..				12.54%
Others	..	..	..	..	1.45%

The age distribution was:—

0— 6 years	75%
7—20 „	13.5%
21 and over	11.3%

40. Through the kind co-operation of the Commonwealth Serum Laboratories, Melbourne, examination was made of 32 specimens of stools and Type I virus was recovered from 19. In addition blood samples were taken from adults in an area to which the epidemic had not spread and on examination immune bodies were found to be present to all three types of virus in all these. It would seem probable, therefore, that the Type I virus had died out in the Colony for some reason unknown for 7–8 years and was then re-introduced. Those below seven years of age would have no natural immunity and a small percentage of those over that age had either lost immunity or had for some reason never been exposed to risk.

41. Nine deaths occurred, there being a relatively high proportion of cases of encephalitic type. Fortunately, a number of respirators were available in the Colony and this number was augmented by the kind co-operation of the R.N.Z.A.F. and the Health Department, New Zealand, who provided additional equipment with characteristic generosity and promptness.

42. Centres have been established at Suva and Lautoka for the continued treatment of paralytic cases and here again the Health Department, New Zealand, gave ready assistance by recruiting and agreeing to the secondment of physiotherapists to the Fiji Medical Service. The Kisan Sangh also assisted generously in providing the Union's building in Lautoka as a treatment centre free of rent.

43. Although anti-poliomyelitis vaccination was offered to certain groups which were considered to be vulnerable before the epidemic occurred, the response was poor. Following the outbreak, however, the demand increased and a fairly large number of children up to the age of 14 years have since received the vaccine on payment. It is proposed to extend the vaccination campaign at reduced charges or free to other groups in areas of greatest risk shortly and also to offer vaccination to all age groups.

44. *Influenza*—Although the number of cases notified was almost as great as that recorded in 1957, when the outbreak of Asian influenza occurred, there was no full-scale epidemic during the year and it is probable that the notifications combined a number of conditions with symptoms similar to influenza, including the early stages of poliomyelitis.

45. *Intestinal Diseases*—Although the number of cases of dysentery (all forms), salmonella infections and infantile diarrhoea (from whatever cause) was lower than in the previous year, this was largely fortuitous and does not reflect a marked improvement in hygiene and sanitation. Village sanitation, in particular, is far below standard in many areas and a considerable improvement is necessary before a satisfactory and lasting decrease in these lethal diseases can be expected.

46. *Tetanus, Diphtheria, Whooping Cough*—Although not directly related, these diseases are mentioned together as a three in one inoculation, triple antigen, is freely available through infant and welfare clinics. If parents would bring their children for vaccination, the incidence of all three diseases could be markedly reduced. Fifty-six cases of tetanus, 13 of diphtheria and 1,000 of whooping cough, were notified. Tetanus carries with it a high mortality in any age group and the number of cases occurring is alarming. The incidence of diphtheria, although not high, shows that it could rise to epidemic proportions if precautions are not taken, and whooping cough, which was in mild epidemic form during the year, can be lethal to infants and has been responsible for a significant increase in the infant mortality in the past.

47. *Measles*—The cycle of epidemic measles seems to be a four year one in Fiji and after the epidemic of last year, the incidence in 1958 was small, only 15 cases being notified. The disease is not as formidable in the Pacific as it used to be, but complications are still by no means uncommon.

48. *Infective Hepatitis*—There can now be no doubt that the incidence of this disease is on the increase. In 1956, 63 cases, in 1957, 163 and in 1958, 279 were recorded. It can be extremely severe in some individuals, but the epidemiology is still obscure and considerable research is still required before control measures can be taken.

49. *Tuberculosis*—Notification figures are known to be inaccurate as owing to the chronicity of the disease the same case may be notified from various sources and equally for a variety of reasons, some cases may escape notification by practitioners in the field. However, as all cases diagnosed do, at some time, attend Government hospitals for diagnosis and treatment, an accurate assessment of prevalence can be obtained from the Central Tuberculosis Registry. It has been decided, therefore, to adopt these figures in future and it is these that are now quoted in the table above. Although it would appear that a marked rise in incidence still continues, most workers connected with the control of the disease in the Colony now agree that the increase shown is largely due to improved case finding. If this is so, a fall in incidence should occur shortly as with early case finding and thus treatment, the infectious period in each case is reduced.



50. Details of control measures have been given elsewhere in this report, but briefly these are—

- (a) improvement in case finding through clinical examination, tuberculin testing and where possible, bacteriological examination and X-ray;
- (b) immunization of the susceptible with B.C.G. vaccine;
- (c) segregation of the infectious cases in hospital for which increased hospital accommodation is being provided;
- (d) follow-up and review of cases discharged from hospital;
- (e) increased surgical treatment of cases that do not respond readily to medication;
- (f) use of I.N.H. in young children who are positive tuberculin reactors and for those chronic cases who are unsuitable for surgery;
- (g) improvement in general standards of living, and
- (h) health education.

51. The trustees of the War Memorial Anti-Tuberculosis Fund have made considerable sums of money available during the year in financing the control programme.

52. *Leprosy*—In assessing the incidence of this disease also a new statistical approach has been used and figures showing admissions to Makogai as obtained from the Central Leprosy Register have been used instead of the notification records. It will be noted that admissions over the last five years remain fairly steady at between 36 and 40. This must mean that although the incidence is not over high, there still remains an undiscovered reservoir of the disease in the community. As soon as staff can be spared from other duties it is proposed to increase the search for these hidden sources of infection.

53. Details of the work on the island of Makogai are given in Appendix VI to this report.

54. *Yaws*—The incidence of the disease as shown by the notification figures does not give a true picture of the situation as a large number of cases notified are non-infectious, and thus of no danger to the community. A re-survey has been included in the work of teams carrying out the B.C.G. vaccination. In addition, A.M.Os and Nurses working in the field are constantly on the look-out for the disease and are reminded to be so by circular and verbal instruction at intervals.

55. *Venereal Diseases*—The number of cases of gonorrhoea (335 as against 375 in 1957) and syphilis (10 as against 26 in 1957) showed a decrease, but there are no grounds for complacency and a close watch must be kept on the situation, particularly with the tendency for young people to drift to the towns where venereal diseases are more prevalent.

## VITAL STATISTICS

56. The Registrar-General's estimates of the population of the Colony at the end of 1958 are shown at Appendix XIII.

57. A census of the Colony's population was held on 26th/27th September, 1956, and the full Report has now been published as Council Paper No. 1 of 1958.

58. The average annual increase of the population for 1936/45 was 6,126, and for 1946/55 was 9,472. The marked upward trend is shown by the estimated increase of 13,246 for 1958. The average annual increases for the two major races for the past decade have been:—

Fijian	..	..	..	..	..	3,367
Indians	..	..	..	..	..	5,425

59. The rates of natural increase for the whole population for the past five years have been (corrected to the nearest whole number):—

1954	..	..	..	..	..	30
1955	..	..	..	..	..	30
1956	..	..	..	..	..	32
1957	..	..	..	..	..	34
1958	..	..	..	..	..	34

60. The following comparative crude birth rates may be noted:—

					1954	1955	1956	1957	1958
Fijians	..	..	..	..	37	34	36	39	36
Indians	..	..	..	..	43	42	44	45	46
Whole Population	..	..	..	..	40	38	39	41	41

61. The infant mortality rates for the past three years have been:—

				1956	1957	1958
Fijians	..	..	..	48	42	38
Indians	..	..	..	45	36	42
Whole Population	..	..	..	46	39	39



## IV—HYGIENE AND SANITATION

62. During the year it was found necessary to re-define the boundaries of all Rural Local Authorities. Advantage was taken to alter boundaries to suit local needs so that centres of population could be placed under those authorities of the natural market towns.

63. There are now 18 local rural authorities. This number is increased to 26 by the addition of those authorities responsible for administration in the City of Suva, the Town of Lautoka, the International Airport at Nadi and the Townships of Nausori, Ba, Nadi, Levuka and Labasa.

64. The minutes of meetings of all local authorities are received by the Central Board of Health and advice is offered on any of the matters raised. All requests for legal aid are passed through the Board to the Crown Law Officers.

65. During the year a great deal of work has been carried out on all public health legislation with a view to bringing it up to date. It is hoped that this will be finalized during 1959.

66. The health staff of all but one local authority is employed by this Department and seconded to the various authorities as is found necessary for carrying out the duties laid down by public health legislation. The return of work carried out by all local health authorities for the last five years includes the following figures:—

	1954	1955	1956	1957	1958
General Sanitary Inspections	42,716	78,036	71,569	92,788	89,925
Sanitary defects remedied ..	23,090	53,018	21,395	28,243	32,763
Written Notices issued ..	4,609	7,827	6,323	7,999	6,587
Closing Orders issued ..	57	110	92	182	50
Demolition Orders ..	212	40	20	53	17
Buildings demolished ..	35	64	42	31	26
Food Premises inspected ..	1,882	5,049	4,112	5,611	12,634
Improvements effected ..	461	1,047	1,350	2,082	2,203
Foodstuffs condemned in lb.	27,696	57,445	101,712	97,209	58,684
Food samples taken ..	426	292	723	399	35

67. *Supervision of new Buildings*—Owing to various economic factors, fewer buildings were erected during the period under review than in previous years.

	1954	1955	1956	1957	1958
Applications received	1,151	2,024	2,115	1,614	3,841
Declared Value ..	£1,797,455	£2,263,460	£2,497,058	£1,581,078	£1,519,521

68. Legal Proceedings were as follows:—

	1954	1955	1956	1957	1958
(a) For offences under the Public Health Ordinance—					
Cases taken to Court ..	225	165	250	333	252
Convictions obtained ..	203	163	243	314	251
Penalties imposed ..	£370	£373	£882	£997	£677
(b) For offences under the Pure Food Ordinance—					
Cases taken to Court ..	42	30	40	7	28
Convictions obtained ..	41	25	35	7	27
Penalties imposed ..	£366	£154	£245	£33	£154

69. *Sewage Disposal*—The owners of new homes continue to prefer septic tanks to the dry conservation system.

	1954	1955	1956	1957	1958
Septic tank proposals passed ..	51	67	1,010	425	267
Latrine Slabs sold ..	452	716	601	487	885

70. *Garbage Disposal*—Local Authority garbage disposal systems continued to operate satisfactorily during the year.

71. *Rat Destruction*—

	1954	1955	1956	1957	1958
Number of Poison Baits set ..	915	1,930	400	997	
Number of traps set ..	12,640	9,977	9,528	4,905	8,498
Number of rats caught ..	1,875	1,720	1,203	1,944	1,619
Rats sent to Laboratory ..	78	63	58	88	74

No rats were found to be infected with plague.

72. *Water Supplies*—Regular inspections and examinations of Government water supplies were continued in close co-operation with the Public Works Department.

Number of samples taken—

	1954	1955	1956	1957	1958
Bacteriological test ..	179	129	612	346	318
Chemical test ..	2	....	....	....	3
Sea Water (Public Baths) ..	13	20	18	22	45



## V—SEAPORT AND AIRPORT HEALTH AND QUARANTINE

73. The ports and airports of entry remain unchanged, Suva and Lautoka being ports of entry for shipping for all overseas vessels and Levuka being restricted to ships from those overseas ports other than recognized malarial areas.

74. The International Airport at Nadi is open to all land 'planes and Laucala Bay to all sea-planes. Landings at Nausori Airport are generally restricted to aircraft from disease-free areas, but by special arrangements aircraft from other areas can be accepted.

75. The following figures show the number of ships and aircraft dealt with at all ports:—

	1958
Ships given pratique .. .. .	317
Landing passengers .. .. .	3,461
Aircraft given pratique .. .. .	1,873
Landing Passengers .. .. .	16,861
Overseas vessels fumigated (cyanide) .. .. .	1
Local vessels fumigated (cyanide) .. .. .	74
Overseas vessels fumigated with Aerosols .. .. .	70
Aircraft treated with Aerosols .. .. .	646
International Deratization Certificate .. .. .	1
International Deratization Exemption Certificates .. .. .	5

Cyanide fumigations are restricted to the Port of Suva.

76. A matter worthy of mention is the introduction of a new species of mosquito, *Aedes Vigilax*. This species is a serious pest in parts of Australia and in New Caledonia where it breeds in enormous numbers in salt marshes. It is also reported from the coastal areas of New Guinea and Esperitu Santo.

77. Apart from its importance as a pest, *Aedes Vigilax* from the first two named countries is known to be a highly efficient laboratory vector of the New Caledonian strain of non-periodic *Wuchereria Bancrofti*. As there are many suitable areas in the coastal mangrove swamps, it was considered urgent to investigate the potentialities of this species, with a view to possible extermination before it had time to spread from its initial breeding areas around Suva harbour. However, Mosquito Inspectors from widely separated areas were soon reporting the presence of this new specimen and it is now firmly established in the delta of the Colony's largest river, the Rewa. The delta covers some 80 square miles and it is obvious that it would require a major operation to carry out complete extermination. The mosquito has fortunately proved to be a poor carrier of *W. Bancrofti* locally.

78. It is not possible to be definite as to where *A. Vigilax* entered the Colony, partly at least because the control and inspection system is designed to exclude anophelines and no great importance is attached to culicines. It is, however, most likely that it came by air and evaded the usual precautions taken to exclude importation of mosquitoes. A later report incriminates the International Airport at Nadi, though the conditions at the seaplane base at Laucala Bay afford more suitable breeding areas for their reception.

## VI—HOSPITALS AND DISPENSARIES

79. The centres available for the treatment of the sick are : 44 dispensaries, in the charge of an Assistant Medical Officer, located at centres of population both rural and urban throughout the Colony. Fourteen rural hospitals, the majority of which are administered by A.M.Os, are sited at points convenient for the collection of cases who require hospital treatment from their immediate environs or from outlying dispensaries. Divisional hospitals, four in number, are situated at the divisional centres and draw their patients either from the immediate surrounding population or from the rural hospitals if greater facilities for diagnosis and treatment are required than are available at the latter. The actual location of these dispensaries and hospitals is shown at Appendix II (a).

80. The size of the rural hospitals varies from 52 to 9 beds and they fulfil a useful function in providing accommodation for those cases where a satisfactory clinical diagnosis can be made and treatment is short-term; for treatment of those persons who normally would receive domiciliary treatment but where home conditions are unsatisfactory and for convalescent cases from the major divisional units. They do much to relieve pressure on the divisional hospitals.

81. The Colonial War Memorial Hospital, Suva (298 beds) continued to fulfil its triple role of specialist centre for the Colony, teaching hospital for medical and nursing students from the Central Medical School and Central Nursing School, and divisional hospital for the central division. In general, nursing staff was maintained at reasonable strength at this hospital during the year, but the poliomyelitis epidemic added greatly to the burden of work which had to be undertaken. Many improvements have been achieved by the Medical Superintendent and his senior staff and the hospital can now be considered to be of high standard although much needed expansion and improvements are still delayed through lack of funds. Further details are given in Appendix IV.

82. Excellent work was carried out at the Lautoka Hospital during the year despite the unsatisfactory nature of the hospital buildings, the overcrowding due to lack of accommodation and the frequent changes of senior nursing staff. A very severe strain was placed on the medical



## II

and nursing staff by the poliomyelitis epidemic and all members are to be congratulated on the way in which they gave of their best during this trying time. Although the bed strength is shown at 168, far more patients have frequently had to be accommodated. Additional beds have been put up in any space available and patients have often to be accommodated on mattresses on the floor. The daily average bed occupancy during the year stood at 175.6.

83. The Labasa and Levuka hospitals functioned satisfactorily during the year. These hospitals are also of antiquated design, but the pressure on accommodation is not quite as great as in Lautoka and Suva, although it is considerable. There are frequent difficulties of retaining staff owing to the less satisfactory accommodation which can be offered and lack of modern conveniences.

83A. Specialized institutions are: The Tuberculosis Hospital at Tamavua, the Leprosy Hospital and Settlement at Makogai, the transit station at St. Elizabeth Home, Suva, the Mental Hospital, Suva. Details are given in Appendices III, VI, VII and V, and only brief mention of these institutions need be made here.

84. Some enlargement of the Tamavua Hospital is taking place from funds made available by the Trustees of the War Memorial Anti-Tuberculosis Fund and an additional 65–70 beds will shortly be available. At Makogai the extension to the physiotherapy department was completed during the year and opened by Sir Hugh Ragg. Funds for this building were provided by the New Zealand Lepers' Trust Board. The Mental Hospital, although by no means meeting up to modern requirements, provided accommodation, care and treatment for about 190 patients and the staff gave excellent service.

## VII—DENTAL DIVISION

85. The Dental Division of the department fulfils four main functions—

- (a) the establishment and maintenance of permanent dental clinics.
  - (b) the provision of a school dental service.
  - (c) the production of a dental health education programme, and
  - (d) the training of Assistant Dental Officers, Dental Hygienists and Dental Mechanics.
- Details of the work are given at Appendix VIII.

86. The policy of concentrating on conservative dental treatment of children was continued both in the dental centre and in the school dental work. The mobile dental clinic, provided during the year from funds made available from an annual grant to the Medical Department by the Colonial Sugar Refining Company, will aid much in the expansion of the school dental work. Dental health education, under the guidance of the Senior Dental Officer made excellent progress. Posters designed by the Senior Dental Officer and produced by the kindness of the South Pacific Commission were distributed during the year and the provision of low cost toothbrushes to schools increased in popularity.

## VIII—LABORATORY DIVISION

87. The Central Laboratory, Suva, although within the precincts of the Colonial War Memorial Hospital, is an independent section of the department. Specimens are sent for examination from all parts of the Colony and from time to time investigations are undertaken for other island territories. In addition to clinical pathology, bacteriology etc., required by both hospitals and private practitioners, the Pathologist in charge undertakes a great amount of medico-legal work and examination of food samples. Furthermore the training of A.M.Os and laboratory technicians is carried out in this Laboratory. The demand for blood for transfusion purposes continued to increase and a blood bank was established which again has added greatly to the work of the staff.

88. A small subsidiary laboratory for routine clinical tests has been established at Lautoka. It had been hoped to set up small laboratories at Labasa and Levuka, but the number of students in training as technicians has been reduced as an economy measure and thus this much needed expansion will be delayed for some years.

## IX—NUTRITION

89. The staff of the department concerned with rationing of hospitals and feeding of patients and staff consists of a Supervising Dietitian and five housekeepers. The Supervising Dietitian directed the work of the housekeepers at the major hospitals and also advised officers in charge of the smaller hospitals on matters connected with catering. The Supervising Dietitian left the Colony on completion of her contract in July and has not yet been replaced, but it is hoped to fill the vacancy shortly as her services have proved invaluable and marked economies resulted from her standardization of diets and overall direction.

90. The general nutrition research and education work of the Colony is carried out by the Nutritionists of the South Pacific Health Service, which has its headquarters in Suva. Lectures on nutrition were given to A.M.Os and Nurses by the staff of this Service who also organized the training of Assistant Dietitian/Housekeepers. Various booklets, posters and teaching aids were produced during the year and two numbers of Tropical Food and Nutrition were published.



## X—TRAINING

91. Training of Assistant Medical Officers and Assistant Dental Officers continued at the Central Medical School. Details regarding the number of students under training and their countries of origin, are given in an appendix to this report, together with other information connected with the School. As was reported last year, a grant totalling £20,000 has been made by the Nuffield Foundation to establish a department of Preventive and Social Medicine at the School. Building had started by the end of the year and the premises should be available shortly. A Medical Officer has been appointed as whole-time lecturer in Public Health and this aspect of the training has been given further emphasis. To stress still further to the student the need for the preventive approach in medicine, a new feature has been introduced into the curriculum with the organization of a medical and social survey, by the final year students and some of the teaching staff, of the population of one of the smaller islands. The island of Gau (population 2,000) was chosen this year and much useful information was obtained as well as providing invaluable training for the students.

92. At the Central Nursing School, Tamavua, the Principal, assisted by her tutorial staff, was responsible for 181 students of which 158 were taking the local course and 23 the New Zealand standard course. During the year the first group of students to enter the New Zealand course, took their final examinations and out of seven students five were successful and the remaining two failed in only one subject each.

93. At the Lautoka School 82 students were in training, all on the local course. Training of a small number of girls is undertaken at Labasa, but it is proposed to close this school as being too small and thus uneconomic. The students will be absorbed into the Tamavua and Lautoka schools. Training is also undertaken at the Methodist Mission Hospital, Ba.

94. Some difficulty was again experienced in obtaining training staff and it is thus all the more to the credit of the Principal of the Central Nursing School and other members of staff at Tamavua and Lautoka that excellent results were achieved despite the long hours of duty which became necessary.

95. Other courses of training undertaken in the department were for Assistant Health Inspectors, Assistant Pharmacists, Assistant Radiographers, as well as those mentioned previously for Laboratory Technicians, Dental Hygienists, Dental Mechanics and Dietitians.

## XI—DEPARTMENTAL VESSELS

96. A number of vessels are maintained and controlled by the Medical Department, amongst which are the following:—

The 42-ton A.K. *Vuniwai* used chiefly for carriage of staff on inspection and transfer, the transport of patients, particularly those suffering from tuberculosis and leprosy, and for the distribution of medical supplies. The vessel was also used in times of emergency to carry foodstuffs and, on occasions, for the transport of special teams on survey or other research work.

The A.K. *Makogai*, as her name indicates, is the vessel used as transport for the Leprosy Settlement on the island of Makogai and was used to convey stores, staff, visitors and discharged patients between Makogai and Viti Levu and Levuka.

The launch *Eileen*, also based on Makogai, was used mainly for the collection of copra from various points on the island, in fishing expeditions for patients and staff and provides communication between Makogai and Levuka.

The launch *Vuniwai-ni-toba* was used for purposes of giving pratique to vessels arriving in Suva harbour, for fumigation and deratization duties and for short journeys to neighbouring islands including weekly visits to the quarantine islands of Makuluva and Nukulau.

The *Adi Makareta*, which was based formerly at Wainibokasi, was transferred to Labasa for relatively short journeys within the reef. The Rewa river in which she formerly navigated has now become so silted that she was unable to fulfil her proper function.

97. Various motorized punts are either in use or on order for river and close coastal work. The annual grant given to the Department by the Colonial Sugar Refining Company for child welfare work is being used, with the Company's permission, for the purchase of more of these vessels for transport of Health Sisters and A.M.Os.

## XII—PHILANTHROPIC ORGANIZATIONS

98. *New Zealand and Fiji Lepers' Trust Boards*—The Fiji Board, under the Chairmanship of Sir Hugh Ragg, continued to disburse funds allocated to Fiji by the parent body—the New Zealand Lepers' Trust Board. Again a splendid allocation of £NZ.11,000 was made. The tireless efforts of Mr. P. J. Twomey, M.B.E., J.P., the Secretary of the New Zealand Board, and the generosity of all those people of New Zealand who gave of their time and money are very deeply appreciated.

99. The money is used to provide grants to ex-leprosy patients who for one reason or another require financial assistance and for various works of a capital nature at Makogai and St. Elizabeth Home.



100. *War Memorial Anti-Tuberculosis Fund*—This Fund amassed from voluntary contributions is administered by a Board of Trustees of which the Chairman is Sir Hugh Ragg and Secretary, Mr. W. E. Donovan, I.S.O., K.S.G. The money has been made available for a variety of buildings and pieces of equipment during the past years. During the year the trustees financed the building of a new recreation room, at Tamavua Hospital, which will release a ward, at present used for recreation purposes and thus making available an additional 65–70 beds, and erection of a records room. Funds were also provided for the B.C.G. vaccination campaign.

101. *British Red Cross Society*—The Fiji Branch, under the Presidency of Lady Maddocks and the Directorship of Mr. E. B. Povey, was most active during the year and gave great assistance to the Department in providing diversional therapy, mobile libraries, children's clothing and toys and special equipment for hospitals including an electrocardiograph and oxygen tent (from the Lautoka division). A group for handicapped children was also organized on a weekly basis in Suva.

102. *St. John Ambulance Brigade and Association*—First-aid and Home Nursing classes were continued and the enthusiasm of members maintained throughout the year. Members of the Brigade continued to give invaluable assistance by manning ambulances at the Colonial War Memorial Hospital during the night hours. This service is entirely voluntary and its value has been proved on numerous occasions. The value of the first-aid training has also been frequently demonstrated.

103. *Home of Compassion*—The Home of Compassion staffed by Marist Sisters accepts aged ladies who, for some reason or another, require some degree of nursing care. The institution is excellently run and fulfils a very real need.

104. *The Cottage Home*—This home for aged people is supported by public subscription and also is well organized and of great importance to the welfare of the elderly.

105. *Mercy Flights*—Once again tribute should be paid to the officers and men of the Royal New Zealand Air Force, who, from their flying-boat base at Laucala Bay, have given invaluable assistance in times of emergency. On a number of occasions during the year calls for their services to pick up patients or drop supplies for persons seriously ill or injured have been met with immediate response. The service given without hesitation and with characteristic efficiency, has undoubtedly raised morale amongst those living on far away islands and has assisted in saving a number of lives.

### XIII—METEOROLOGY

106. Summaries of the meteorological observations for 1958 are given at Appendix XVII. For these, I am indebted to the Meteorological Officer at Laucala Bay, Suva.

P. W. DILL-RUSSELL,  
Director of Medical Services.

APPENDIX I  
DEPARTMENTAL ESTABLISHMENT

1958

1. MEDICAL AND ADMINISTRATIVE SECTION—							
Director of Medical Services	..	..	..	..	..	..	1
Deputy Director of Medical Services	..	..	..	..	..	..	1
Secretary	..	..	..	..	..	..	1
Senior Medical Officers	..	..	..	..	..	..	5
Physician Specialist	..	..	..	..	..	..	1
Surgeon Specialist	..	..	..	..	..	..	1
Surgeon	..	..	..	..	..	..	1
Medical Officers	..	..	..	..	..	..	15
Ophthalmologist	..	..	..	..	..	..	1
Radiologist	..	..	..	..	..	..	1
Pathologist	..	..	..	..	..	..	1
Anaesthetist	..	..	..	..	..	..	1
Dental Surgeons	..	..	..	..	..	..	2
Assistant Medical Officers	..	..	..	..	..	..	125
Assistant Dental Officers	..	..	..	..	..	..	12
Physiotherapist	..	..	..	..	..	..	1
2. NURSING SECTION—							
Nursing Superintendent	..	..	..	..	..	..	1
Matrons and Assistant Matrons	..	..	..	..	..	..	6
Sisters in Charge	..	..	..	..	..	..	3
Nursing Sisters	..	..	..	..	..	..	54
Health Sisters	..	..	..	..	..	..	13
Principal (1) Tutors (6) Nursing School	..	..	..	..	..	..	7
Nurses	..	..	..	..	..	..	375
3. TECHNICAL SECTION—							
Laboratory Superintendent	..	..	..	..	..	..	1
Chief Laboratory Assistant	..	..	..	..	..	..	1
Laboratory Assistants	..	..	..	..	..	..	13
Chief Health Inspector	..	..	..	..	..	..	1
Health Inspectors (11) Assistant Inspectors (23)	..	..	..	..	..	..	34
Government Pharmacists (3) Assistants (4)	..	..	..	..	..	..	7
Radiographers (3) X-Ray Assistants (4)	..	..	..	..	..	..	7
Supervising Dietitian	..	..	..	..	..	..	1
Dental Hygienist (1) Assistant Dental Hygienists (4)	..	..	..	..	..	..	5
Dental Mechanics	..	..	..	..	..	..	3
4. CLERICAL SECTION—							
Clerical Staff	..	..	..	..	..	..	57
5. SUPERVISORY SECTION—							
Mental Hospital Attendants (2) Orderlies (20)	..	..	..	..	..	..	22
Caretaker, Quarantine Island	..	..	..	..	..	..	1
Overseers (2) Storekeepers (3)	..	..	..	..	..	..	5
Occupational Instructor	..	..	..	..	..	..	1
Housekeepers (7) Laundresses (2) Seamstress (1)	..	..	..	..	..	..	10
Subordinate Staff	..	..	..	..	..	..	592
6. CENTRAL MEDICAL SCHOOL—							
Principal	..	..	..	..	..	..	1
Medical Officers	..	..	..	..	..	..	2
Anatomy and Surgery Lecturer	..	..	..	..	..	..	1
Science Lecturer	..	..	..	..	..	..	1
Chemistry Lecturer	..	..	..	..	..	..	1
Dental Officers	..	..	..	..	..	..	2
Assistant Medical Officer	..	..	..	..	..	..	1
Housekeeper (1) Clerical staff (3) Servants (18)	..	..	..	..	..	..	22
Laboratory Attendants	..	..	..	..	..	..	3
7. FIJI LEPROSY HOSPITAL—							
Senior Medical Officer	..	..	..	..	..	..	1
Clerical Staff	..	..	..	..	..	..	2
Overseer (1) School teachers (2) Constables (5)	..	..	..	..	..	..	8
Bakers (4) Labourers and Servants (37)	..	..	..	..	..	..	41
Nursing Sisters	..	..	..	..	..	..	23
Assistant Nursing Sisters	..	..	..	..	..	..	11
8. MALARIA PREVENTION AND FILARIASIS CONTROL—							
Surveyor in Charge	..	..	..	..	..	..	1
Inspectors and Assistants	..	..	..	..	..	..	67
9. CENTRAL MEDICAL RESEARCH LIBRARY—							
Librarian	..	..	..	..	..	..	1
Clerical Staff	..	..	..	..	..	..	1



## APPENDIX II (a)

## HOSPITALS AND DISPENSARIES

									<i>Beds</i>
MAIN AND SPECIALIST HOSPITALS—									
Colonial War Memorial Hospital, Suva	..	..	..	..	..	..	..	298	
Tamavua Tuberculosis Hospital, Suva	..	..	..	..	..	..	..	362	
Mental Hospital, Suva	..	..	..	..	..	..	..	156	
Fiji Leprosy Hospital, Makogai	..	..	..	..	..	..	..	600	
DISTRICT HOSPITALS—									
Lautoka	..	..	..	..	..	..	..	168	
Labasa	..	..	..	..	..	..	..	104	
Levuka	..	..	..	..	..	..	..	40	
SUBSIDIZED HOSPITALS—									
Methodist Mission Hospital, Ba	..	..	..	..	..	..	..	41	
Private Hospital, Colonial Sugar Refining Company, Ba	..	..	..	..	..	..	..	12	
RURAL HOSPITALS—									
Nailaga, Ba	..	..	..	..	..	..	..	20	
Wainibokasi	..	..	..	..	..	..	..	52	
Waiyevo, Taveuni	..	..	..	..	..	..	..	52	
Vunidawa	..	..	..	..	..	..	..	20	
Koromumu, Sigatoka	..	..	..	..	..	..	..	28	
Vaileka, Rakiraki, Ra	..	..	..	..	..	..	..	18	
Nadi	..	..	..	..	..	..	..	37	
Savusavu	..	..	..	..	..	..	..	32	
Vunisea, Kadavu	..	..	..	..	..	..	..	24	
Lomaloma, Lau	..	..	..	..	..	..	..	16	
Rotuma	..	..	..	..	..	..	..	16	
Lakeba, Lau	..	..	..	..	..	..	..	11	
Matuku	..	..	..	..	..	..	..	9	
Nabouwalu, Bua	..	..	..	..	..	..	..	30	

See Appendix II (b) for details of out-patients.

See Appendix II (b) for details of in-patients

## DISPOSITION OF URBAN AND RURAL DISPENSARIES

*In Suva—*

Suva Gaol  
 Samabula  
 Tamavua Out-patients (General) Dispensary  
 Nabua

*Central Division (under Divisional Medical Officer)—*

Beqa Island	Nausori Clinic
Korovou, Tailevu North	Navua
Lodoni	Nayavu
Lomanikoro	Korovisilou
Mokani	Viria
Namosi	

*Eastern Division—*

Gau	Koro
Kabara	Moala
Ono-i-lau	Yaro, Kadavu

*Western Division (under Divisional Medical Officer, Lautoka)—*

Korolevuiwai	Natuatuaćoko
Nadarivatu	Naviti, Yasawa
Nadi Airport (administered from Suva)	Sautabu
Namarai	Tau
Nanukuloa	Tavua
Nasau	Vatukoula

*Northern Division (under Divisional Medical Officer, Labasa)—*

Dreketi	Visoqo
Lekutu	Wainunu
Naduri	Rabe Island Community
Kioa Island	Saqani
Natewa	Korotasere
Tukavesi	

Total Rural Dispensaries—44

See Appendix II (b) for details of out-patients.

APPENDIX II (b)

The following tables show the analyses of in-patients and out-patients for the year 1958:

1. CENTRAL AND DISTRICT HOSPITALS ADMISSIONS—RACIAL DISTRIBUTION

Race	C.W.M. Hospital	Tamavua	Lautoka	Labasa	Levuka	Totals
Fijians .. .. .	2,258	428	1,165	399	519	4,769
Indians . . . . .	3,554	93	4,243	1,561	82	9,533
Europeans and Part-Europeans ..	816	13	205	44	69	1,147
Chinese and Others .. .	501	34	211	19	29	794
Totals .. .	7,129	568	5,824	2,023	699	16,243

2. OUT-PATIENTS THROUGHOUT THE COLONY

Race	C.W.M. Hospital	3 District Hospitals	14 Rural Hospitals	Rural Dispensaries	Totals
Fijians .. .. .	40,602	25,949	67,338	152,413	286,302
Indians . . . . .	63,156	74,448	61,383	50,375	249,362
Europeans and Part-Europeans ..	5,060	2,975	12,578	22,009	54,381
Chinese and Others .. .	7,531	4,228			
Totals .. .	116,349*	107,600	141,299	224,797	590,045

\* Includes 14,735 dental cases

3. GENERAL AND RURAL HOSPITALS—ADMISSIONS

Hospitals	No. of Beds	Daily average In-patients	Admissions
Colonial War Memorial Hospital ..	298	260	7,129
Tamavua Tuberculosis Hospital ..	362	362	568
Three District Hospitals . . .	314	291	8,546
Fourteen Rural Hospitals .. .	365	235	8,566
Totals .. .	1,339	1,148	24,809

The mean annual turnover in all hospitals is 8.5 persons per bed, being an average stay of 43 days per patient: On an average day there were 1,148 persons in hospital beds, being at the rate of 3.3 persons per mille total inhabitants. The hospital beds available, 1,339 were at the rate of 3.9 beds provided per mille of the total inhabitants.



## APPENDIX III

## TUBERCULOSIS DIVISION—1958

The year 1958 saw the completion of Tamavua Hospital's twelfth year as the Colony's main tuberculosis hospital. Throughout the year, the daily average bed state was 362.

2. Recent comparative figures are set out below:—

	1947	1951	1952	1953	1954	1955	1956	1957	1958
In-patients at 31st Dec. ..	153	220	241	270	304	403	320	325	350
Admissions .. ..	269	220	257	360	487	513	482	705	568
Discharges .. ..	183	118	137	248	373	465	392	412	464
Deaths .. ..	64	86	46	53	42	27	29	26	13
Out-patients .. ..	832	1,285	1,756	2,048	2,227	2,790	3,620	3,302	

3. Of the 568 admissions, 428 were Fijians, 93 Indians. There were 86 children under 15 years admitted during the year. Of the 150 readmissions included in the figure of 568, only 63 were relapses.

4. Of the 13 deaths in 1958, 12 were due to tuberculosis, of whom 9 were Fijian, 2 Indian and 1 Rotuman.

5. At the close of the year, there were 78 patients awaiting admission to Tamavua Hospital: many of these were already under treatment elsewhere.

6. The out-patient department consists of a casualty department for those people living near the hospital and a clinic for cases of tuberculosis. There were 3,275 attendances in the casualty section: 1,300 attended for chest X-ray only while 3,302 required full assessment including clinical examinations, chest X-ray, sputum test and blood sedimentation rate. There were 1,274 minor collapse refills and about 100 patients attended for streptomycin injections regularly.

7. 3,331 films from outside centres were received at Tamavua and reported on during the year. Of these, the Radiologist examined 2,040, the remainder being dealt with by the staff as routine reviews. 201 films were referred by the Radiologist to the Medical Officer in Charge.

8. 8,401 Tamavua Hospital reports were sent out in the course of 1958.

9. All tuberculosis reports and other documents pass through a Tuberculosis Registry at Departmental Headquarters, which collates all records and distributes them to those in medical charge of patients, and assumes the duty of securing due follow-up and review examinations. The records of any patient, wherever he may be seen, are collated.

10. 24 patients were transferred to the Colonial War Memorial Hospital for major chest surgery. The procedures were pneumonectomy, lobectomy, apicolysis with polythene-ball plom-bage, thoracoplasty. Phrenic crush and other minor procedures were done at Tamavua. 14 patients were transferred to the Maternity Annexe, Colonial War Memorial Hospital.

11. The Dental Clinic, which had been equipped by the War Memorial Anti-Tuberculosis Trust Fund, is operated by the Dental Division of the Department and during 1958 performed 894 procedures, including fillings, extractions and miscellaneous treatments.

12. An Occupational Therapy Department has been fully equipped by the Trust Fund and has a full-time staff of two men. It is used by male and female patients.

13. Many entertainments of a special kind as well as the weekly film shows were given to the patients during the year.

14. The farm and plantation was further improved by the construction of a dam with a capacity of approximately 160,000 gallons. 1958 was a very dry year, but crops to the value of almost £2,000 were harvested. The piggery proved successful after a modest start and produced pork to the value of £500. The egg production was less than in 1957 as virus pneumonia infected a large number of the "day-old" chickens imported during the year.

## APPENDIX IV

## COLONIAL WAR MEMORIAL HOSPITAL, SUVA

Every effort has been made to improve the facilities and amenities at the Colonial War Memorial Hospital. The kitchens have been remodelled, storage facilities re-organized and the inadequate kitchen at the non-paying Maternity Annexe closed.

2. As well as being the specialist hospital, the Colonial War Memorial Hospital is the teaching hospital for medical students from the Central Medical School and student nurses from the Central Nursing School: it also provides post-graduate facilities for A.M.Os.

3. *Out-patients Departments*—The overall number of out-patients has risen. While this may be partly due to the increase in population, it is more likely because of the development of services. Two new clinics were started during the year—diabetic and physiotherapy clinics.

4. The total number of out-patients seen during 1958 is analysed in the following table:—

					<i>European</i>	<i>Fijian</i>	<i>Indian</i>	<i>Others</i>	<i>Total</i>
<i>Specialist Clinics—</i>									
General Medical	..	..	..	..	364	547	2,220	330	3,461
Diabetic	..	..	..	..	27	40	501	29	597
General Surgical	..	..	..	..	258	702	937	189	2,086
Fracture	..	..	..	..	176	698	1,011	108	1,993
Physiotherapy	..	..	..	..	30	66	112	39	247
Ophthalmic	.	..	..	..	142	1,815	3,466	700	6,123
<i>Obstetric—</i>									
Colonial War Memorial Hospital	..	..	..	..	..	4,959	11,174	824	16,957
Wainibokasi	.	..	..	..	..	1,648	956	..	2,604
Sub-Fertility & Family Planning	.	..	..	..	4	31	407	8	450
<i>General Out-patients—</i>									
Paying	..	..	..	..	591	2,985	2,760	320	6,656
Non-Paying	.	..	..	..	498	22,734	33,092	4,116	60,440
					2,090	36,225	56,636	6,663	101,614

5. A total of 60,440 was seen in the Non-Paying Out-patients Department. This was an increase of over 20,000 on the 1957 figures and testified to the improved services.

6. Staff consisted of one Medical Officer, three Assistant Medical Officers, a Nursing Sister and nursing staff.

7. The department remains open 24 hours a day and deals with all admissions, casualty cases and non-paying out-patients.

8. As an adjunct, family planning and sub-fertility clinics were held by the Medical Officer and attendance increased greatly during the year.

9. Tuberculosis comes only incidentally into the work of the Colonial War Memorial Hospital, but as can be seen from the out-patients figures, it was thought necessary to provide special out-patient facilities for the follow-up of acute rheumatism and diabetes.

10. Diabetics are admitted to the ward for tuition and indoctrination and then attend the clinics. These clinics have been surprisingly successful with a very small failure rate.

11. The acute rheumatism clinic was split off from the cardiac clinic late in the year to enable the staff to have more time for these young people and to develop a more highly organized service. The clinic uses monthly injections of Benzathine penicillin for prophylaxis and with gratifying results, we have had few relapses in early non-defaulting cases in the three years this method has been used.

12. *Wainibokasi Ante-Natal Clinic*—It was found necessary to open an ante-natal clinic at Wainibokasi Hospital to relieve the pressure of work at Suva. This was commenced in June 1957 and a weekly Saturday visit by two of the Assistant Medical Officers was arranged. As the number of attendances were increasing, it was found necessary to increase these visits twice weekly from early 1958.

13. The number of ante-natal attendances at the Wainibokasi Clinic during the last two years was as follows:—

						<i>Fijians</i>	<i>Indians</i>
1957	..	..	..	..	..	1,359	500
1958	..	..	..	..	..	1,648	956

14. *In-Patients*—The admissions to hospital have reached saturation point and the main reason for the increase in 1958 was the poliomyelitis outbreak which caused further over-crowding of the hospital. A house, formerly used as a Medical Officer's residence, was taken over as a ward.

15. A noticeable trend during 1958 was the increase in cases of protein malnutrition. It is disappointing to recall the subsequent course of these children was not favourable after their discharge from hospital.



16. Infective Hepatitis was also common with one death again in 1958. Efforts to incriminate leptospira have been so far unsuccessful.

17. Acute nephritis was not so rife in 1958 as is usual. The high incidence of this and acute rheumatism indicates the prevalence of haemolytic streptococci in a population not renowned for sore throats.

18. The number of admissions to the Colonial War Memorial Hospital was:—

	<i>Europeans</i>	<i>Fijians</i>	<i>Indians</i>	<i>Others</i>	<i>Total</i>
Admission to Main Block ..	668	1,499	2,085	204	4,456
Admissions to Non-Paying Maternity Annexe .. .. .	....	730	1,322	138	2,190
Admissions to Paying Maternity Annexe .. .. .	148	29	147	159	483
Totals ..	816	2,258	3,554	501	7,129

19. The surgical work done was as follows:—

*Operating Theatre—*

Total number of patients attended	..	..	..	2,919
General Surgery .. .. .	..	..	..	1,210
Ophthalmic Surgery .. .. .	..	..	..	194
Plaster Room .. .. .	..	..	..	1,275
Minor Operating Theatre .. .. .	..	..	..	240
Total number of Operations Performed	..	..	..	1,454
Grand Total of Procedures Carried Out	..	..	..	2,969

*Anaesthesia—*

Total Number of Anaesthetics given	..	..	..	1,814
Types—Relaxant .. .. .	..	..	..	300
Inhalation .. .. .	..	..	..	637
Local .. .. .	..	..	..	270
Spinal/Extra-dural .. .. .	..	..	..	96
Others .. .. .	..	..	..	83
Plaster Room cases .. .. .	..	..	..	200
Minor Operating Room cases	..	..	..	228

*Surgery Details—*

Gastro-Intestinal Surgery .. .. .	..	..	..	..	Total	183
Appendicectomy .. .. .	..	..	..	..	..	77
Cholecystectomy .. .. .	..	..	..	..	..	15
Gastrectomy .. .. .	..	..	..	..	..	10
Laparotomy .. .. .	..	..	..	..	..	12
Gastro-enterostomy .. .. .	..	..	..	..	..	13
Plastic to Common Bile Duct	..	..	..	..	..	2
Imperforate Anus .. .. .	..	..	..	..	..	2
Hemicolectomy .. .. .	..	..	..	..	..	4
Oversewing Ruptured Ulcer	..	..	..	..	..	5
Haemorrhoidectomy .. .. .	..	..	..	..	..	10
Bowel Resection .. .. .	..	..	..	..	..	2
Gastro-cholecystostomy .. .. .	..	..	..	..	..	2
Ramstedt's Operation .. .. .	..	..	..	..	..	1
Hellers Operation .. .. .	..	..	..	..	..	1
Other—Major .. .. .	..	..	..	..	..	12
Minor .. .. .	..	..	..	..	..	15
Thoracic Surgery .. .. .	..	..	..	..	..	Total 54
Apicolysis or Plombage .. .. .	..	..	..	..	..	14
Lobectomy .. .. .	..	..	..	..	..	11
Pneumonectomy .. .. .	..	..	..	..	..	2
Thorocoplasty .. .. .	..	..	..	..	..	5
Thorcotomy .. .. .	..	..	..	..	..	2
Lung Decortication .. .. .	..	..	..	..	..	3
Pericardectomy .. .. .	..	..	..	..	..	1
Vagotomy .. .. .	..	..	..	..	..	1
Segmental Resections .. .. .	..	..	..	..	..	2
Other Major Chest Surgery .. .. .	..	..	..	..	..	4
Bronchoscopy .. .. .	..	..	..	..	..	8
Abscess Drainage .. .. .	..	..	..	..	..	1
Vascular Surgery .. .. .	..	..	..	..	..	Total 15
Potts' operation for Tetralogy of Fallot	..	..	..	..	..	1
Splenectomy .. .. .	..	..	..	..	..	3
Mitral Valvulotomy .. .. .	..	..	..	..	..	4
Arterial Suture .. .. .	..	..	..	..	..	1
Varicose Vein Surgery .. .. .	..	..	..	..	..	6

Gynaecological Surgery	..	..	..	..	..	..	Total	302
Dilatation and Curettage	..	..	..	..	..	..		173
Ligation of Fallopian Tubes	..	..	..	..	..	..		13
Lower Segment Caesarian Section	..	..	..	..	..	..		23
Classical Caesarian Section	..	..	..	..	..	..		9
Total Hysterectomy	..	..	..	..	..	..		16
Sub-Total Hysterectomy	..	..	..	..	..	..		3
Vaginal Hysterectomy	..	..	..	..	..	..		4
Rupture Ectopic Gestation	..	..	..	..	..	..		6
Colpo-perineorrhaphy	..	..	..	..	..	..		5
Colporrhaphy	..	..	..	..	..	..		2
Ovarian Cystectomy	..	..	..	..	..	..		12
Ventro-suspension	..	..	..	..	..	..		6
Myomectomy	..	..	..	..	..	..		4
Oophorectomy	..	..	..	..	..	..		4
Salpingectomy	..	..	..	..	..	..		2
Others	..	..	..	..	..	..		20
Orthopaedic Surgery	..	..	..	..	..	..	Total	93
Amputations (any member)	..	..	..	..	..	..		20
Manipulations	..	..	..	..	..	..		2
Sequestectomy	..	..	..	..	..	..		15
Bone Removals for Osteomyelitis (including saucerization etc.)	..	..	..	..	..	..		10
Plating Fractures	..	..	..	..	..	..		3
Pinning Fractures	..	..	..	..	..	..		2
Fracture Zygoma Elevation	..	..	..	..	..	..		5
Meniscectomy	..	..	..	..	..	..		2
Patellectomy	..	..	..	..	..	..		4
Others—Major	..	..	..	..	..	..		22
Minor	..	..	..	..	..	..		8
Ear, Nose and Throat Surgery	..	..	..	..	..	..	Total	98
Tonsillectomy and Adenoidectomy	..	..	..	..	..	..		45
Nasal Polypectomy	..	..	..	..	..	..		8
Laryngoscopy	..	..	..	..	..	..		8
Antra proof puncture	..	..	..	..	..	..		6
Diathermy to Turbinates	..	..	..	..	..	..		7
Mastoidectomy	..	..	..	..	..	..		3
Others	..	..	..	..	..	..		21
Genito-Urinary Surgery	..	..	..	..	..	..	Total	184
Cystoscopy	..	..	..	..	..	..		66
Hydrocoele cure	..	..	..	..	..	..		22
Nephrolithotomy	..	..	..	..	..	..		11
Prostatectomy	..	..	..	..	..	..		11
Nephrectomy	..	..	..	..	..	..		6
Orchidectomy	..	..	..	..	..	..		8
Trans-urethral Prostatectomy	..	..	..	..	..	..		2
Scrotal Resection	..	..	..	..	..	..		3
Ureto-lithotomy	..	..	..	..	..	..		7
Hypospadias	..	..	..	..	..	..		1
Nephrocystectomy	..	..	..	..	..	..		1
Transplantation of Ureter	..	..	..	..	..	..		1
Decapsulation of left kidney	..	..	..	..	..	..		1
Others	..	..	..	..	..	..		28
Dilatation of Urethra	..	..	..	..	..	..		16
Hernia Repairs	..	..	..	..	..	..	Total	62
Hernioplasty (Nylon Graft)	..	..	..	..	..	..		28
(Nylon Darn)	..	..	..	..	..	..		13
Herniotomy	..	..	..	..	..	..		6
Herniorrhaphy Diaphragmatic	..	..	..	..	..	..		1
Incisional	..	..	..	..	..	..		2
Umbilical	..	..	..	..	..	..		1
Strangulated	..	..	..	..	..	..		5
Bilateral	..	..	..	..	..	..		6
Plastic Surgery	..	..	..	..	..	..	Total	37
Skin Graft	..	..	..	..	..	..		14
Hare Lip Repair	..	..	..	..	..	..		8
Cleft Palate	..	..	..	..	..	..		4
Nasal Repair	..	..	..	..	..	..		3
Excision Scars	..	..	..	..	..	..		5
Others	..	..	..	..	..	..		3



Thyroid Surgery .. .. .	..	..	..	..	..	..	Total	15
Sub-Total Thyroidectomy .. .. .	..	..	..	..	..	..		8
Adenoma .. .. .	..	..	..	..	..	..		6
Cyst-Thyroglossal .. .. .	..	..	..	..	..	..		1
Neurosurgery .. .. .	..	..	..	..	..	..	Total	11
Pituitary Tumour .. .. .	..	..	..	..	..	..		1
Laminectomy .. .. .	..	..	..	..	..	..		1
Extra-dural Haematoma .. .. .	..	..	..	..	..	..		1
Meningocele .. .. .	..	..	..	..	..	..		1
Nerve Repair .. .. .	..	..	..	..	..	..		1
Neuro Fibroma .. .. .	..	..	..	..	..	..		3
Skull Traction .. .. .	..	..	..	..	..	..		1
Others .. .. .	..	..	..	..	..	..		2
Breast Surgery .. .. .	..	..	..	..	..	..	Total	7
Simple Mastectomy .. .. .	..	..	..	..	..	..		4
Radical Mastectomy .. .. .	..	..	..	..	..	..		1
Biopsy .. .. .	..	..	..	..	..	..		2
Application of Radium .. .. .	..	..	..	..	..	..	Total	20
Wound Toilet .. .. .	..	..	..	..	..	..	Total	14
Minor Operations in Theatre .. .. .	..	..	..	..	..	..	Total	156
Minor Operation Theatre Lists .. .. .	..	..	..	..	..	..	Total	240

20. The number of eye operations performed in the Main Theatre is as under:—

Ophthalmic Surgery .. .. .	..	..	..	..	..	..	Total	197
Cataract Extractions .. .. .	..	..	..	..	..	..		97
Iridectomy .. .. .	..	..	..	..	..	..		15
Enucleation .. .. .	..	..	..	..	..	..		14
Needling .. .. .	..	..	..	..	..	..		12
Sclerotomy (Anterior) .. .. .	..	..	..	..	..	..		8
Entropion .. .. .	..	..	..	..	..	..		15
Pterygium .. .. .	..	..	..	..	..	..		8
Dacrocystectomy .. .. .	..	..	..	..	..	..		3
Corneal Suture .. .. .	..	..	..	..	..	..		4
Carbolisation of Corneal Ulcer .. .. .	..	..	..	..	..	..		1
Plastic repairs of Orbit .. .. .	..	..	..	..	..	..		4
Probing of Lacrymal duct .. .. .	..	..	..	..	..	..		2
Excision of wart on lid .. .. .	..	..	..	..	..	..		3
Evisceration .. .. .	..	..	..	..	..	..		2
Exploration in Orbit .. .. .	..	..	..	..	..	..		1
Excision of Conjunctival growth .. .. .	..	..	..	..	..	..		1
Irrigation of Anterior Chamber .. .. .	..	..	..	..	..	..		4
Excision of Lenticular Tag .. .. .	..	..	..	..	..	..		1
Suturing of perforating wound of eye-ball .. .. .	..	..	..	..	..	..		2

21. The number of minor operations performed in the Eye Out-patient Clinic is as under:—

Minor Eye Operations .. .. .	..	..	..	..	..	..	Total	302
Pterygium .. .. .	..	..	..	..	..	..		86
Entropion .. .. .	..	..	..	..	..	..		10
Extropion .. .. .	..	..	..	..	..	..		3
Chalazion .. .. .	..	..	..	..	..	..		42
Corneal Foreign Body .. .. .	..	..	..	..	..	..		111
Incision of Hordeolum .. .. .	..	..	..	..	..	..		6
Incision of Lid Abscess .. .. .	..	..	..	..	..	..		6
Incision of Punctum .. .. .	..	..	..	..	..	..		1
Incision of Acute Dacryocystitis .. .. .	..	..	..	..	..	..		5
Excision of conjunctival growth .. .. .	..	..	..	..	..	..		6
Excision of epibulbar dermoid .. .. .	..	..	..	..	..	..		1
Excision of wart (lid) .. .. .	..	..	..	..	..	..		1
Excision and diathermy of conjunctival growth .. .. .	..	..	..	..	..	..		2
Removal of conjunctival foreign body .. .. .	..	..	..	..	..	..		2
Removal of subtarsal foreign body .. .. .	..	..	..	..	..	..		1
Diathermy to lids .. .. .	..	..	..	..	..	..		2
Others .. .. .	..	..	..	..	..	..		17

22. The number of eye operations performed at Labasa during the visit of the Assistant Medical Officer (Ophthalmology) was:—

Cataract .. .. .	..	..	..	..	..	..	36
Entropion .. .. .	..	..	..	..	..	..	3
Pterygium .. .. .	..	..	..	..	..	..	16
Anterior Sclerotomy .. .. .	..	..	..	..	..	..	1

23. *Maternity Paying Annexe*—The figures for the paying Maternity Annexe were:—

Admissions .. .. .	483
Discharges .. .. .	476
Normal Labours .. .. .	305
Abnormal Labours .. .. .	124
Still-births .. .. .	3
Neo-natal Deaths .. .. .	9
Caesarian Sections .. .. .	12
Ante-partum Haemorrhages .. .. .	7
Post-partum Haemorrhages .. .. .	16
Secondary post-partum Haemorrhages .. .. .	1
Retained Placenta .. .. .	7
Placenta praevia .. .. .	4
Anaemia .. .. .	2
Toxaemia .. .. .	13
Hyperemesis .. .. .	1
Instrumental deliveries with general anaesthetic .. .. .	4
Instrumental deliveries with Trilene .. .. .	62
Persistent occipito-posterior .. .. .	8
Breech presentations .. .. .	13
Face presentations .. .. .	3
Prolapsed Cords .. .. .	1
Number of babies .. .. .	440
Number of females .. .. .	212
Number of males .. .. .	228

24. During the year at the non-paying Maternity Annexe, there were 1956 confinements, an increase of 56 over the 1957 figures. This represents an average stay of 4 days per patient with all beds filled every day of the year: it does mean that the average stay in hospital for an uncomplicated labour is 2 days.

	<i>Fijians</i>	<i>Indians</i>	<i>Others</i>	<i>Total</i>
Admissions .. .. .	730	1,322	138	2,190
Discharges .. .. .	719	1,323	135	2,177
Deaths .. .. .	1	2	....	3
Admitted not in labour .. .. .	32	205	15	252
Normal labour .. .. .	568	989	104	1,661
Abnormal labour .. .. .	131	140	24	295
Total Confinements .. .. .	699	1,129	128	1,956
Live births .. .. .	680	1,088	125	1,893
Premature births .. .. .	28	46	2	76
Multiple births .. .. .	10	11	6	27
Still-births .. .. .	19	41	3	63
Total viable infants born alive or dead .. .. .	699	1,129	128	1,956
Neo-natal infant deaths .. .. .	18	57	4	49
Maternal Morbidity—Anaemia .. .. .	1	51	....	52
Pre-eclamptic toxaemia .. .. .	8	43	1	52
Eclampsia .. .. .	....	4	....	4
Puerperal pyrexia .. .. .	24	63	....	87

25. *Radiological Department*—In the Radiological Department the total number of cases increased by more than 30 per cent as compared with 1957.

	<i>Indians</i>	<i>Fijians</i>	<i>Europeans</i>	<i>Others</i>
In-patients .. .. .	2,022	1,716	477	336
Out-patients . .. .	3,104	2,924	1,301	675
Total .. .. .	5,126	4,640	1,778	1,011

Grand Totals : 1958—12,555 1957—9,631

## 26. Special investigations were further increased in 1958—

	1958	1957
Intravenous Pyelography .. .. .	196	152
Barium Meals .. .. .	346	229
Barium Enemas .. .. .	61	53
Heart Screenings and Barium Swallow .. .. .	236	157
Retrograde Pyelography .. .. .	17	26
Cholecystography .. .. .	113	104
Silogram .. .. .	2	6
Bronchography .. .. .	62	33
Cholecystography I. V. .. .. .	3	....
Myelogram . .. .	4	3
Peri-renal Pneumography .. .. .	5	4

27. *Laundry*—A total of 1,538,208 articles was laundered in 1958, an increase of 92,746 over 1957, without a corresponding increase in staff. The equipment is getting old and there is an absence of modern drying apparatus which causes considerable difficulty and dislocation in persistently wet weather.



## APPENDIX V

## MENTAL HOSPITAL

The number of patients in the Hospital increased during the year.

2. Occupational therapy continued during the year and finger-painting was added to the patients' activities. The sum of £126 15s. 0d. was raised from the sale of articles made by the patients and it is hoped that enough money will be raised to buy a cine-projector.

3. Details of staff are as follows:—

Medical Superintendent (part-time)  
 Head Attendant  
 Assistant Attendant  
 8 Female Fijian Orderlies  
 4 Female Samoan Orderlies  
 9 Male Fijian Orderlies  
 5 Male Samoan Orderlies  
 1 Male Fijian Cook  
 2 Male Indian Cooks  
 1 Male Fijian Kitchen Hand.

4. The following table shows admissions and discharges:—

Remaining in the Hospital at the end of 1957	160	
Admitted during 1958 .. .. .	91	
	—	251
Discharged during 1958 .. .. .	8	
Absent on trial during 1958 .. .. .	51	
Died in Institution during 1958 .. .. .	1	
Remaining in Hospital at end of 1958 .. .. .	191	
	—	251

5. The following table shows the length of residence of patients remaining in the Hospital the end of 1958—

<i>No. of Years</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
0 to 1 year .. .. .	29	21	50
1 to 2 years .. .. .	8	14	22
2 to 3 years .. .. .	14	16	30
3 years and over .. .. .	56	33	89
			—
	Total ..		191

6. The patients were classified as follows:—

<i>Classification</i>	<i>Number</i>
Manic depressive psychosis .. .. .	81
Schizophrenia .. .. .	98
Mental defective .. .. .	13
Delusions .. .. .	1
Epilepsy .. .. .	13
Senility .. .. .	20
Spastic diplegia .. .. .	2
General Paralysis of the Insane .. .. .	2
Alcoholism .. .. .	4
Involuntional Melancholia .. .. .	2
Psychosis with Arteriosclerosis .. .. .	4
Idiocy .. .. .	6
Not yet diagnosed .. .. .	5

7. The racial distribution and sex of patients was as follows:—

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Europeans .. .. .	10	10	20
Fijians .. .. .	29	25	54
Indians .. .. .	87	70	157
Others .. .. .	13	7	20

8. One death occurred in the Hospital. It was due to pulmonary embolism in a case of pre-senile dementia.

9. The following table shows the race and sex of the various patients:—

		<i>Europeans</i>		<i>Fijians</i>		<i>Indians</i>		<i>Others</i>		<i>Total</i>		<i>Total</i>
		M	F	M	F	M	F	M	F	M	F	M & F
Remaining at end of 1957	..	8	8	16	10	54	48	11	5	89	71	160
Admitted during 1958	..	2	2	14	14	33	22	2	2	51	40	91
											—	251
Absent on Trial 1958	..	1	2	6	10	16	15	1	..	24	27	51
Discharged during 1958	..	2	..	2	..	4	..	..	..	8	..	8
Died during 1958	..	..	..	..	..	1	..	..	..	1	..	1
Remaining at end of 1958	..	7	8	22	14	66	55	12	7	107	84	191
											—	251

The number absent on trial  
including those absent on  
trial during 1958 .. .. 9 8 32 29 56 73 8 .. 105 110 215

10. Forty-two patients received electro-convulsive therapy.
11. Quarterly visits were paid by the Board of Visitors.
12. Gifts to the Institution were made as follows:—
- (a) Mr. and Mrs. Sakuthen, Indian pudding to all patients.
  - (b) St. Andrews Presbyterian Xmas Cheer Fund, fruit, biscuits, cigarettes for the patients.
  - (c) Dudley Girls' School, Toorak, a present to each female patient—soap, toothbrush.
  - (d) Rotary Club per Mrs. A. Bernard—a parcel to each patient.
  - (e) Mr. Tommy Dalip Ram (Fiji Construction Works) 17 dozen aerated waters.
  - (f) Mr. and Mrs. Pujana, Tamavua Hospital, a mid-day Sunday meal for all patients.



## APPENDIX VI

## CENTRAL LEPROSY HOSPITAL, MAKOGAI, FIJI

The island of Makogai has been devoted since 1911 to the treatment of persons of all races suffering from leprosy. The northern half of the island is kept for the hospital and patients' villages; the arable land in this area is also given over to them for cultivation. The southern half of the island is reserved for the houses of members of the staff and for a small farm; it also provides the grazing for a herd of about 50 head of milk cattle. The island is volcanic in origin and measures approximately three miles from north to south by two miles from east to west. It rises steeply to 870 feet and there are two other peaks of over 700 feet.

2. The able-bodied male patients live in villages outside the central hospital, each race having its own village. Here they are encouraged to live as normal a village life as possible so as to reduce the likelihood of their becoming "institutionalized" and incapable of looking after themselves when they are discharged. Apart from sleeping and eating, they are at liberty to mix freely with patients of other races and racial harmony on the island is excellent. It is of interest to note that, over the years, a sort of Makogai "lingua franca" has developed consisting mainly of Fijian but with words and constructions from almost every other South Pacific language grafted on to it.

3. Within the hospital live all the female patients and those males who are too sick, too young or too old to look after themselves in the villages. Men and women are allowed to meet for a chat for an hour each morning and evening but, apart from this, it has been found that to keep the sexes strictly segregated is much the most satisfactory arrangement. When married couples are admitted as patients, they are allowed to live together but their children are removed at birth and brought up by the Sisters until they are old enough to be sent to relatives outside. Two such births occurred during 1958. No marriages are permitted between patients and no healthy relatives of patients are allowed to live on the island.

4. Since the founding of the Fiji Leprosy Hospital in 1911, 3,771 patients have been treated. There have been 1,658 cases of arrest of the disease, 476 repatriations, and 1,187 deaths. At the end of 1958 the number of patients was 450 of whom 338 were from within the Colony. During the year there were 38 admissions, 121 discharges and 11 deaths. Fifteen Gilbertese patients were repatriated. To the best of the writer's knowledge, 121 is the largest number of patients ever discharged from Makogai in one year. These figures do not include two patients who were admitted for investigation but discharged again when it was determined that they were not suffering from leprosy and one old patient who was re-admitted for surgical treatment of a trophic ulcer.

5. The patients actually in Makogai on 31st December, 1958, were divided racially as follows:—

Fijians	..	..	..	..	..	120
Indians	..	..	..	..	..	172
Europeans and part-Europeans	..	..				18
Chinese and others		..	..	..		140

6. *Establishment*—The staff of the hospital consists of the following:—

Senior Medical Officer (Medical Superintendent)  
 Local Superior of the Missionary Sisters of the Society of Mary  
 17 Sisters  
 Executive Officer  
 Class III Clerk  
 Supervisor (Mechanical)  
 Overseer (Stock, Farm and Labour)  
 Sergeant, Corporal and 3 Police Constables  
 Master of A.K. *Makogai* and 4 Members of Crew  
 41 Labourers.

7. The Medical Superintendent also acts as Sub-Accountant, Postmaster and Magistrate. He maintains a daily surgery for members of the staff and their families. During 1958 2,546 patients were seen.

8. The Medical Superintendent was absent from his post from 5th to 29th November during which time he travelled to Tokyo to represent Fiji at the VIIth International Congress of Leprology and the World Health Organization Inter-Regional Conference on Leprosy which was held immediately afterwards.

9. The following staff changes took place among the Sisters:—

*Departures*—

Sister Mary Judith, transferred to Australia, 17/2/58  
 Sister Mary Capistran, transferred to U.S.A., 3/3/58  
 Sister Mary Angelica, on leave to U.S.A., 10/5/58  
 Sister Mary Valentine, transferred to Suva, 7/10/58  
 Sister Mary Monica, on leave to N.Z., 4/12/58  
 Sister Mary Dorothea, on leave to N.Z., 9/12/58

*Arrivals*—

Sister Mary Marguerita, transferred from Suva, 4/10/58  
 Sister Mary Alcime, transferred from Suva, 4/10/58  
 Both these Sisters were returning to Makogai after a temporary transfer to Suva.

10. *Teaching*—No Assistant Medical Officers underwent refresher courses in leprology during the year. Thirteen final-year students from the Central Medical School spent a fortnight in Makogai.

11. *Statistics*—The classification used in Makogai is a simplification of the Madrid classification. It is easy to use, simple to learn and adequate for statistical purposes. Cases are divided up as follows:—

Tuberculoid 1	..	Cases with a few leprides and minor disturbances of sensation only
Tuberculoid 2	..	Cases with thickened and painful nerves and/or more and larger leprides
Tuberculoid 3	..	Cases with deformities
Lepromatous 1	..	Cases with a few lepromata or with no skin lesions but with positive smears
Lepromatous 2	..	Gases with numerous lepromata <i>or</i> several large ones, or with nodules
Lepromatous 3	..	Numerous and extensive lepromatous skin lesions with or without lesions of the mucous membranes
Indeterminate T/L	..	Indeterminate cases indicative of tuberculoid rather than lepromatous leprosy
Indeterminate L/T	..	Indeterminate cases indicative of lepromatous rather than tuberculoid leprosy.

	1958	1957	1956	1955
Total number of admissions	38	49	60	45
Adults .. .. .	29	42	43	39
Children (under 14) ..	9	7	17	6
Tuberculoid 1 .. ..	6	16	13	9
2 .. ..	8	11	14	5
3 .. ..	2	2	1	3
Lepromatous 1 .. ..	5	4	16	7
2 .. ..	9	10	11	19
3 .. ..	3	0	5	1
Indeterminate L/T .. ..	2	3	..	1
Indeterminate T/L .. ..	3	3	..	..

12. It is appreciated that these figures extend over too short a period to be really significant, but it would seem from them that the number of cases being discovered annually in Fiji has not materially reduced. Moreover, the number of children admitted remains high in proportion to the total admissions which would seem to indicate a population without a high degree of resistance to the disease. The figures for 1956 are swollen by the admission in one batch of 11 patients from Tonga in that year. However, the proportion of tuberculoid cases admitted does seem to be rising which leads one to believe that some degree of immunity is beginning to develop.

13. The progress of the various patients divided by classification is shown in the next table:—

			T1	T2	T3	L1	L2	L3	T/L	L/T
Improved	..	..	42	47	62	79	102	16	9	1
Stationary	..	..	19	13	4	88	68	11	2	2
Worse	..	..	3	..	..	13	13	..	..	..

14. This table includes all those cases discharged during the year who are shown as having improved and also those admitted during the year, all except the earliest of whom are shown as stationary. The number of lepromatous cases is of interest in that it is more than twice the number of tuberculoid cases. This is extremely high.

15. The number of patients remaining stationary has risen and will continue to rise as our total numbers decrease until a stage is reached when the discharges equal the admissions. This is an inevitable concomitant of dwindling numbers.

16. The racial division of discharges and deaths is as follows:—

*Discharges*—(All patients notified as suffering from leprosy)

1. Fijians .. .. .	34
2. Indians .. .. .	40
3. Europeans and Part—Europeans .. .. .	1
4. Chinese and others .. .. .	46
Total	121



17. *Deaths*—

## 1. Fijians

- (a) Bilateral lobar pneumonia
- (b) Acute gastro-enteritis
- (c) Chronic nephritis & anaemia
- (d) Chronic nephritis & anaemia
- (e) Lobar pneumonia & anaemia

## 2. Indians

- (a) Senility

## 3. Europeans and Part-Europeans—Nil.

## 4. Chinese and others

- (a) Congestive cardiac failure and Bronchiectasis
- (b) Right-sided cardiac failure and Bronchiectasis
- (c) Cerebral thrombosis
- (d) Chronic nephritis and anaemia
- (e) Pulmonary embolism and anaemia

## Total Number of Deaths:

Fijians	..	..	..	..	..	..	5
Indians	..	..	..	..	..	..	1
Europeans and Part-Europeans				..	..	..	..
Chinese and Others	..	..	..	..	..	..	5
							11

18. It is thought that much of the anemia and chronic nephritis seen in Makogai is due to amyloid disease but further study is required.

19. *Treatment*—No new departure was made in the standard treatment used which remained in almost every case Diamino-Diphenyl-Sulphone by mouth or by injection. A small trial was made of a proprietary preparation of Diamino-Diphenyl-Sulphone in Chaulmoogra oil given by twice weekly injections of 2 c.c. containing 400 mgm. Diamino-Diphenyl-Sulphone. It seemed to have no advantage over Diamino-Diphenyl-Sulphone alone when given in this dosage.

20. The long-term results of the surgical treatment of trophic ulcers recorded in the Annual Report for 1957 proved disappointing and over 50 per cent of these ulcers eventually broke down again. The treatment is, however, being persisted with but more detailed training in the after-care of their feet is being given to the patients involved.

21. *Research*—A trial was commenced in 1957 of the efficacy in leprosy of various drugs which are commonly used in the treatment of tuberculosis. Sixty patients took part in the trial. All were clinically inactive but bacteriologically positive at the commencement of the trial. They were divided by random selection into four groups of 15.

22. The first group was given Streptomycin 1 G. twice weekly, the second INAH 100 mg. twice daily, the third PAS 4 G. three times a day and the fourth was a control group. All four groups were also given Diamino-Diphenyl-Sulphone 400 mg. twice a week. The trial was continued for a year and then the results assessed by the Medical Superintendent and a Sister. Neither of them knew at the time to which group a particular patient belonged. Of Group I, thirteen patients had improved, that is, they were still inactive and their smears had become negative or much less positive. Of Group II, fourteen had improved; of Group III, twelve had improved and of Group IV, thirteen had improved. It was concluded that, although the trial was small in numbers and of short duration, there was little point in persisting with it as the control group was doing just as well as the others. Streptomycin, INAH and PAS given in the doses used seem to have no effect in enhancing the value of Diamino-Diphenyl-Sulphone.

23. *Tuberculosis*—All patients undergo routine chest X-ray on admission and again at intervals of three years. During 1958, two new cases of pulmonary tuberculosis were discovered and two old cases were found to have become active again. One patient was discharged from the Tuberculosis Ward. At the end of the year, eight cases were undergoing treatment; there were 44 patients who, at one time or another, had been notified as having tuberculosis and there were 54 cases who had chest X-rays sufficiently suspicious to warrant their being checked at more frequent intervals—usually every six months.

24. *X-Ray and Physiotherapy Departments*—These two departments remained active throughout the year in spite of space being very cramped. In December, a fine new Physiotherapy Department was opened which has eased the situation considerably.

25. During the year, 540 X-rays were taken. That this is a lesser number than usual is due to the declining number of patients and partly to the fact that the routine chest X-rays were completed in 1957 and it was not until the latter half of 1958 that the first patients to be done became due again for examination.

26. In the Physiotherapy Department, 2,876 sessions of exercises were held and 5,616 patients underwent electro-therapy of various types, many of the latter also having massage.



27. *Surgery*—All surgery is carried out single-handed by the Medical Superintendent. Local or spinal anaesthesia is used as much as possible. When general anaesthesia is unavoidable, the simplest type of open ether inhalation is administered by a Sister under the supervision of the Surgeon. 102 operations were performed during 1958 and they fell into the following groups—

Incision of abscess .. .. .	10
Excision and scraping of trophic ulcers .. .. .	28
Excision of warts .. .. .	3
Excision of sebaceous cysts .. .. .	15
Supra-pubic cystotomy .. .. .	1
Excision of ischio-rectal fistula .. .. .	1
Enucleation of toe-nail .. .. .	3
Manipulation of shoulder under G. A. .. .. .	1
Reduction of dislocated shoulder .. .. .	1
Removal of ganglion from wrist .. .. .	1
Amputation of digits .. .. .	8
Plastic operation to ears .. .. .	4
Plastic operation to eyelids .. .. .	2
Removal of lipoma from breast .. .. .	1
Decapsulation of nerves .. .. .	5
Circumcision .. .. .	8
Appendicectomy .. .. .	1
Exploratory laparotomy and appendicectomy .. .. .	2
Gastro-enterostomy .. .. .	1
Herniorrhaphy .. .. .	2
Radical cure of hydrocele .. .. .	4
Total ..	102

28. *Dentistry*—The Sister who normally carries out routine dentistry departed on leave during the year and her job was gallantly taken over by another Sister. In spite of having had no previous training, she soon became adept.

29. A Dental Officer visited Makogai for about a fortnight and prepared and fitted 8 total and 18 partial dentures.

30. The following routine dental treatment was carried out—

Treatment of mouth and gums .. .. .	315
Filling of cavities .. .. .	55
Extractions .. .. .	324
Scaling .. .. .	13
Dentures (complete and partial) .. .. .	26

31. *Laboratory*—The laboratory was staffed throughout most of the year by one Sister but pressure of work necessitated the posting of a second Sister from time to time. The normal heavy traffic in urine examinations, blood counts and sputum examinations was carried out. In addition, every patient had his or her haemoglobin estimated every two months. No fewer than 5,594 skin smears were examined for mycobacterium leprae.

32. *Occupational Therapy*—Practically every patient who is fit for it is now employed in some fashion. The Ernest Wolfgramm Technical Institute and the Alice Austin Arts and Crafts Centre are always busy. All teachers in these and the Makogai School are patients and the pupils show great enthusiasm. The standard of work turned out seems to achieve new heights every year. The new Physiotherapy building was built entirely by patients and extensive reconstructive work was carried out in the villages.

33. The Sisters' quarters were renovated and repainted for the first time in 23 years and this work was also performed by patients. In spite of prolonged drought, the gardens and plantations are flourishing.

34. The Boy Scouts built themselves two new boats—a fast motor launch and a dinghy, and the patients also built a work-boat for collecting copra, and a new dinghy for the launch, *Eileen*.

35. The Boy Scouts and the Girl Guides are enthusiastically active and all sporting events—Soccer, Cricket and Basketball, as well as our annual Sports Day—were vigorously contested.

36. *Lepers' Trust Board*—The Lepers' Trust Board continued to exhibit its customary generosity. The Physiotherapy building referred to above was built with funds contributed by the Board and it was fitting that it should be opened in December by Sir Hugh Ragg who is Chairman of the Fiji branch of the Board. The usual stream of gift boxes, all crammed with good things, continued to arrive throughout the year. Indeed, so many boxes arrived that we ran short of storage space for them and had to ask the Board to build us a new store for this purpose which they promptly gave us the money to do. At the end of the year it was almost completed.

37. The Fiji branch of the Lepers' Trust Board visited Makogai in December and held a meeting here.

38. *Visitors*—The highlight of the year was a visit from Her Majesty, Queen Salote of Tonga which took place in March. Her Majesty spent a night in Makogai and endeared herself to all by her great charm and friendliness.



39. In all, 78 persons signed our Visitors' Book in 1958, although this is not the total number of people who visited us during the year. The following list gives an idea of the variety of people we meet during a year's work:—

Superintendent of Police, Levuka  
 Rev. C. A. Hatcher, Methodist Mission, Levuka  
 Senior Magistrate, Suva  
 District Medical Officer, Eastern  
 Her Majesty Queen Salote of Tonga  
 Ship's complement of H.M.N.Z.S. *Pukaki*  
 Rev. John Dodd, Church of England Mission, Levuka  
 Dental Officer, Suva  
 Chief Medical Officer, Gilbert and Ellice Islands Colony  
 Members of Sergeants' Mess, R.N.Z.A.F. Station, Laucala Bay, Suva  
 Meteorological Officer, Suva  
 Director of Medical Services  
 Deputy Director of Medical Services  
 Members of the Lepers' Trust Board (Fiji) Inc.  
 Most Reverend Bishop Foley.

40. Special mention must be made of the visit of the members of the Sergeants' Mess of the R.N.Z.A.F. Station, Laucala Bay, Suva. This visit which is made by Sunderland Flying Boat has now become an annual pre-Christmas event. Each year these gentlemen make a most generous donation of gifts to the patients and a contribution to the Comforts Fund. This year they presented a cheque to the value of £116 0s. 0d. all of which sum they collected among themselves.

41. *General*—The year saw two new staff quarters completed in Nasau. These were badly needed.

42. A new spring was discovered by one of the patients at the northern end of the island, tapped and fed into a well. This well was then connected with the water mains and contributes an estimated 10,000 gallons a day to the hospital area.

43. Makogai suffered from its second successive year of drought so this additional water was most welcome. As well as drought, we had "near misses" from two hurricanes, one in February and the other in December. Minor structural damage occurred but crops and coconut trees suffered considerably.

44. In conclusion, it gives great pleasure to place on record a debt of gratitude to the Sisters and lay staff of the hospital for their unfailing help and cheerfulness.

## APPENDIX VII

## ST. ELIZABETH HOME—KOROVOU, SUVA

Discharged cases from Makogai housed until transport was arranged for their various destinations in and outside the Colony—

					<i>Male</i>	<i>Female</i>	<i>Total</i>
Fijians	..	..	..	..	15	17	32
Indians	..	..	..	..	27	14	41
Cook Islanders	..	..	..	..	3	1	4
Gilbertese	..	..	..	..	3	6	9
Solomon Islanders	..	..	..	..	5	4	9
Tongans	..	..	..	..	6	2	8
Euronesians	..	..	..	..	1	..	1
Rotumans	..	..	..	..	1	3	4
Chinese	..	..	..	..	1	..	1
Samoans	..	..	..	..	3	5	8
					<hr/> 65	<hr/> 52	<hr/> 117

## 2. Patients housed pending removal to Makogai:—

					<i>Male</i>	<i>Female</i>	<i>Total</i>
Fijians	..	..	..	..	12	5	17
Indians	..	..	..	..	17	4	21
Solomon Islanders	..	..	..	..	1	..	1
Euronesians	..	..	..	..	1	1	2
Rotumans	..	..	..	..	1	..	1
					<hr/> 32	<hr/> 10	<hr/> 42

## 3. Patients on survey, or other matters, housed during the year:—

					<i>Male</i>	<i>Female</i>	<i>Total</i>
Fijians	..	..	..	..	24	12	36
Indians	..	..	..	..	17	6	23
Solomon Islanders	..	..	..	..	3	6	9
Rotumans	..	..	..	..	1	..	1
					<hr/> 45	<hr/> 24	<hr/> 69

## 4. Total number of discharged patients from Suva, Rural and Urban, during 1958:—

					<i>Male</i>	<i>Female</i>	<i>Total</i>
Suva Urban	..	..	..	..	8	1	9
Suva Rural	..	..	..	..	11	12	23
					<hr/> 19	<hr/> 13	<hr/> 32



## APPENDIX VIII

## DENTAL DIVISION—MEDICAL DEPARTMENT

The dental health programme in Fiji has developed around three main parts which are closely interwoven—

- (1) Training of Dental Personnel (see Central Medical School—Appendix X)
- (2) Provision of Dental Treatment
- (3) Dental Health Education and Preventive Dentistry.

## (2) PROVISION OF DENTAL TREATMENT

(a) *Suva Dental Clinic*

2. This clinic has 9 chairs in the main surgery and a theatre for surgical operations together with three offices, a laboratory, a waiting room, a dark room, a lecture room and toilets. It serves as administrative headquarters for the dental division and also as dental school.

*Staff—*

D. M. Ellerton, B.D.S.	..	..	Senior Dental Officer
I. L. Vosailagi, B.D.S.	..	..	Dental Officer
Mrs. N. H. Palmer	..	..	Dental Hygienist
I. Nadakuitavuki	..	..	Assistant Dental Officer
D. Singh	..	..	Assistant Dental Officer
S. Goundar	..	..	Assistant Dental Officer
L. Narayan	..	..	Assistant Dental Officer
J. Savou	..	..	Assistant Dental Officer
K. Vatanimato	..	..	Assistant Dental Officer
Sister M. Usher	..	..	Nursing Sister
M. Vidovi	..	..	Senior Nurse
Madan Pal	..	..	Assistant Dental Mechanic
L. Permal	..	..	Assistant Dental Mechanic
Susan Pene	..	..	Assistant Dental Hygienist

Dental Officer A. H. Thomson of the Central Medical School staff is in charge of Conservative Dentistry and conducts an Orthodontic clinic for school children.

Dental Officer J. L. Godfrey of the Central Medical School staff is in charge of Prosthetic Dentistry.

Final year students in the course of their clinical training contributed largely to the treatments carried out.

4. *Treatments provided—**Operative—*

Fillings	..	..	..	..	..	3,806
Temporary fillings	..	..	..	..	..	2,182
Scalings	..	..	..	..	..	554

*Surgery—*

Extractions—permanent	..	..	..	..	4,718
deciduous	..	..	..	..	2,815
Surgical operations	..	..	..	..	73
General Anaesthetics	..	..	..	..	135
Fractured Mandible fixations	..	..	..	..	37

*Radiography—*

Films taken	..	..	..	..	..	815
-------------	----	----	----	----	----	-----

*Dentures—*

Complete dentures	..	..	..	..	51
Full upper and lower	..	..	..	..	12
Partial dentures	..	..	..	..	56
Repairs and rebases	..	..	..	..	66

*Attendances—Adults—*

Europeans	..	..	..	..	..	461
Part-Europeans	..	..	..	..	..	372
Fijians	..	..	..	..	..	2,820
Indians	..	..	..	..	..	2,738
Others	..	..	..	..	..	408

Total .. 6,799

*Attendances—Children—*

Europeans	..	..	..	..	..	944
Part-Europeans	..	..	..	..	..	1,193
Fijians	..	..	..	..	..	1,557
Indians	..	..	..	..	..	3,782
Others	..	..	..	..	..	460

Total .. 7,936

Total Adult and Child Attendances .. 14,735

Revenue .. .. . £1,673 9s. 6d.

*(b) Lautoka Dental Clinic*

5. This clinic was moved in May from the Lautoka Hospital to the Health Office. It consists of a surgery equipped with a hydraulic dental chair and electric dental unit and a waiting room. The clinic was operated during the year by Assistant Dental Officer Pillai and Assistant Dental Hygienist Eunice Prasad. Dental tours were made to schools in Nadi, Lautoka, Ba, Raki Raki, Yasawas, Vatulele and Malolo.

6. *Treatments provided—*

Permanent fillings .. .. .	1,637
Temporary fillings .. .. .	538
Extractions .. .. .	3,851
Surgical operations .. .. .	11
Fractured Mandible fixations .. .. .	11
Scalings .. .. .	156
Adult attendances .. .. .	1,532
Child attendances .. .. .	5,454
Schools visited .. .. .	53
Revenue .. .. .	£417 5s. 0d.

*(c) Labasa Dental Clinic*

7. This clinic, in a small building adjacent to the hospital, is equipped with a hydraulic chair and a newly installed modern electric dental unit. It was operated during the year by Assistant Dental Officer Ligani while he was not away on dental tours to schools in other parts of Vanua Levu and Taveuni.

8. *Treatments provided—*

Permanent fillings .. .. .	1,104
Extractions .. .. .	3,550
Scalings .. .. .	57
Adult attendances .. .. .	895
Child attendances .. .. .	3,172
Schools visited .. .. .	26
Revenue .. .. .	£231 15s. 0d.

*(d) Levuka Dental Clinic*

9. This clinic, in the medical office, is equipped with a hydraulic chair and a newly installed modern electric dental unit. It was operated until May by Assistant Dental Officer Masi and since then by Assistant Dental Officer Savou. Assistant Dental Hygienist C. Miller was recalled to Suva at the year's end. The size of the clinic was enlarged during the year. Dental tours were made to schools in Gau, Batiki, Nairai, Koro, Moturiki, Lakeba and Kadavu.

10. *Treatments provided—*

Permanent fillings .. .. .	994
Temporary fillings .. .. .	226
Extractions .. .. .	1,201
Scalings .. .. .	96
Total attendances .. .. .	1,606
Schools visited .. .. .	17
Revenue .. .. .	£151 8s. 0d.

*(e) Mobile Dental Clinic*

11. This two-chair vehicle with generator trailer was manufactured in England and purchased with the aid of a grant from the Colonial Sugar Refining Company Limited. Both vehicle and generator are diesel powered. The clinic commenced a circuit of Viti Levu via Queens Road in August carrying a staff of two Assistant Dental Officers and a driver.

12. *Treatments provided—*

Fillings .. .. .	998
Extractions .. .. .	5,548
Schools visited .. .. .	66

*(f) Travelling Dental Teams*

13. Throughout the year a team consisting of two Assistant Dental Officers and an Assistant Dental Hygienist and using portable dental equipment visited schools in the Suva district to provide dental treatment for the pupils. With only two dentists available and so many children to be treated, each school can be visited only once a year and the treatment provided in the time available for each school must be restricted to extractions only—extractions of teeth which would have been filled on the previous visit if more staff had been available.

14. Field trips were made to Kadavu and Makogai.



(g) *Tamavua Dental Clinic*

15. An Assistant Dental Officer was in attendance on Saturday mornings throughout the year.

16. *Treatments provided—*

Fillings	..	..	..	..	..	..	111
Temporary fillings			..	..	..	..	97
Extractions	..	..	..	..	..	..	621
Scalings	..	..	..	..	..	..	25
Miscellaneous treatments			..	..	..	..	40

(h) *Rural Dispensaries*

17. Each dispensary is provided with a basic set of forceps to enable the Assistant Medical Officers to extract diseased teeth.

(3) DENTAL HEALTH EDUCATION AND PREVENTIVE DENTISTRY

18. Again this year the policy has been to concentrate our health education programme on children in their schools. The dental treatment visit at each school is always concluded with a talk on the teeth, dental disease, diet and oral hygiene. These talks were given in over 150 schools in the year. The scheme to provide toothbrushes in schools at a cost of 3d. each continued. In schools with enthusiastic headmasters who see that each child cleans his teeth once a day, the improvement in oral hygiene is remarkable.

19. In December the first of the specially designed and constructed toothbrush cabinets was installed in a Suva school. These ventilated cabinets provide a hygienic and tidy storage for brushes. Three sizes are available.

20. During the year, 200 copies of each of the four dental posters designed by the Dental Hygienist were reproduced by the Literature Bureau of the South Pacific Commission, and distribution to schools commenced.

APPENDIX IX

PATHOLOGICAL DIVISION

*Staff*—The Pathologist was on duty throughout the year. The Laboratory Superintendent, the Chief Laboratory Assistant and one Senior Laboratory Assistant were all on vacation leave in turn during the year.

2. The rest of the staff were on duty throughout the year. One Assistant was granted a Scholarship to study Biochemistry in Melbourne.

3. Eleven students were training during 1958. Seven of these were local, and one each from Papau/New Guinea, American Samoa and Niue. Of these, one local student in his later years resigned, and one local student in his early training was found unsuitable. These two vacancies are at present unfilled in accordance with general policy. This will delay expansion of the Laboratory service and realization of our aim to supply trained Assistants to other hospitals.

4. Three students, one local, one from Niue and one from New Guinea have almost completed their course and should qualify as Assistants in 1959.

5. The appointment of a suitable Assistant Medical Officer for training as an Assistant to the Pathologist was again deferred. Several Assistant Medical Officers were attached to the Laboratory for short periods and proved how useful a suitable one could be in helping the Pathologist in work which needs medical training.

6. *Teaching*—The Pathologist continued the teaching of general pathology, bacteriology and clinical pathology and forensic medicine in the Medical School and, with senior trained members of the Laboratory staff, gave lectures to the Laboratory students to supplement their bench training.

7. *Blood Transfusion Service*—A blood bank was started in the early part of the year, with a domestic type of refrigerator, to hold a small supply of blood for emergencies. The use of blood in the Colonial War Memorial Hospital increased again during the year. 1,011 pints of blood were crossed matched with patients. If this need increases, the provision of extra staff for this service will have to be considered. A specially designed refrigerator and a separate room have been approved for 1959. The blood bank has worked fairly well. It has been hampered by rather poor attendance of donors. Many who had entered their names and been tested did not attend when called. The emergency list of donors with telephones was enlarged and these donors attended when called with their usual willingness.

8. *Routine Examinations*—These, as previously, comprised the main work of the division and were of a very varied nature as shown in detail in Table I, with the principle positive findings in Table II. The total number of examinations was 46,644 which is slightly less than last year, but more than any other previous years.

9. The Laboratory with its present staff is working to full capacity and no Assistants are at present available to staff sub-Laboratories at other hospitals.

10. A feature of the year's work was a very considerable increase, 1,304 as compared with 987 in 1958, in specimens for histology, and in specimens for forensic purposes, 257 as compared with 127 in 1958. These examinations have to be dealt with by the Pathologist, and are ones in which a trained Assistant Medical Officer could help. The number of specimens examined over the years was:—

1939	..	..	..	7,060	1940	..	..	7,930
1941	..	..	..	19,971	1942	..	..	17,123
1943	..	..	..	25,784	1944	..	..	29,500
1945	..	..	..	33,041	1946	..	..	27,149
1947	..	..	..	26,291	1948	..	..	27,557
1949	..	..	..	27,570	1950	..	..	29,742
1952	..	..	..	26,348	1953	..	..	24,527
1954	..	..	..	33,469	1955	..	..	42,487
1956	..	..	..	44,470	1957	..	..	49,552
1958	..	..	..	46,644				

11. *Sources of Specimens*—The principle senders of specimens are shown in Table VI—67 per cent of the specimens were received from the Colonial War Memorial Hospital, or 76 per cent including the Maternity Annexe. There has been an increase in specimens from the surgical wards and Out-patients Departments as compared with last year. 969 specimens were received from private practitioners and 21, mainly histology, from other territories.



12. *Post-mortem examinations*—164 post-mortem examinations were carried out, 55 for the Police. The chief causes of death found were:—

*Accidents—*

Injuries from falls .. .. .	4
Collapse of building .. .. .	1
Traffic .. .. .	7
Drowning .. .. .	5

*Poisons—*

Barbiturate .. .. .	1
Kerosene .. .. .	1
Strychnine .. .. .	1
Fish .. .. .	1

*Suicide—*

Hanging .. .. .	13
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*Homicide—*

Sharp instruments .. .. .	4
Blunt instruments .. .. .	2

*Natural Causes—Adults—*

Acute infections .. .. .	17
Rheumatic infections .. .. .	3
Tuberculosis .. .. .	4
Vascular degenerations, etc. .. .. .	11
Cirrhosis of liver .. .. .	4
Malignant tumours .. .. .	7

*Children—*

Cirrhosis of liver .. .. .	7
Congenital abnormalities .. .. .	2
Acute infections .. .. .	6
Tuberculosis .. .. .	2
Rheumatic fever .. .. .	1

*Neo-natal Deaths—*

Still births .. .. .	3
Congenital abnormalities .. .. .	5
Acute infections .. .. .	12
Tentorial tears .. .. .	2
Pre-maturity .. .. .	1
Obstruction by meconium in air passages .. .. .	1

*Infants-not Neo-natal—*

Acute infections .. .. .	11
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13. *Blood Grouping*—The groups of blood found according to race are shown in Table V. There was a high percentage of group “ B ” in Indians and of Group “ AB ” among Fijians.

14. *Khan Reactions*—Khan reactions showed the same preponderance as formerly of Fijians and other island peoples with positive reactions in spite of a recent campaign of treatment for yaws.

15. 25 per cent of Fijians examined showed a positive reaction, with 14 per cent strongly positive, and 15 per cent of “ others ” who are mainly other island people. The incidence among Indians was 8 per cent and Europeans 1 per cent.

16. A number of healthy volunteer blood donors were found to give positive reactions and it was thought advisable not to place these on the donor list.

17. Details of these reactions by race are shown in Table III.

18. *Branch Laboratory—Lautoka*—A total of 20,423 examinations was carried out in this Laboratory, which was staffed for most of the year by one Assistant and a cleaner.

19. Increase in the number of the staff in this branch is urgently needed, but they are not at present available. Details of the examinations are shown in Table VI.

TABLE I

## CENTRAL LABORATORY, SUVA

Details of specimens etc. examined in Central Laboratory, 1958

1. Histology—						7. Vaccines Prepared—					
Material from biopsies etc.	..	..	..	1,053		T.A.B. 50 c.c. bottles	..	..	1,090		
autopsies..	..	..	..	249		Autogenous vaccines	..	..	10		
Animal tissues	..	..	..	2	1,304					1,090	
2. Haematology—						8. Biochemistry—					
Blood counts—						Estimations in blood and serum—					
White cell counts	..	..	..	3,396		Urea and non-protein nitrogen	..	..	676		
Differential counts	..	..	..	3,514		Sugar	..	..	358		
Eosinophile counts	..	..	..	7		Protein (albumin and globulin ratio)	..	..	276		
Red cell counts.	..	..	..	1,069		Cholesterol	..	..	28		
Haematocrit readings	..	..	..	868		Uric acid	..	..	48		
Haemoglobin estimations	..	..	..	3,748		Calcium	..	..	15		
Reticulocyte counts	..	..	..	1,315		Phosphorus	..	..	3		
Blood sedimentation rates	..	..	..	2,098		Acid phosphatase	..	..	34		
Blood grouping	..	..	..	2,907		Van den Bergh reactions	..	..	177		
Rh grouping	..	..	..	109		Bilirubin estimation	..	..	239		
Donors bled for transfusion	..	..	..	784		Thymol turbidity test	..	..	169		
Cross matching	..	..	..	1,011		Alkaline phosphatase	..	..	169		
Coombs test	..	..	..	5		Icterus index	..	..	5		
Bleeding time	..	..	..	78						2,197	
Clotting time	..	..	..	81		Electrolytes—					
Platelet count	..	..	..	48		Sodium	..	..	81		
Prothrombin index	..	..	..	172		Potassium	..	..	74		
Fragility tests	..	..	..	2		Chlorides	..	..	71		
Marrow smears	..	..	..	107	21,319	Diastase	..	..	9		
						Co <sub>2</sub> combining power	..	..	3		
3. Seminal Fluid—										238	
Fertility tests	..	..	..	11		Urine—					
					11	Routine and microscopical examina-					
4. Parasitology—						tions	..	..	5,427		
Faeces—						Excretion of ascorbic acid	..	..	157		
Microscopic	..	..	..	4,715		Bile	..	..	5		
						Estimation of Urea	..	..	2		
Blood—										5,591	
Films for malaria	..	..	..	32		Cerebro-spinal fluids—					
Microfilaria	..	..	..	464		Cytology	..	..	437		
Mucosal scraping for amoebae	..	..	..	8	5,219	Pandy tests	..	..	437		
						Protein..	..	..	437		
5. Bacteriology—						Sugar	..	..	437		
Microscopic examinations for G.C. etc.—						Chlorides	..	..	437		
Vaginal and cervical smears	..	..	..	505						2,185	
Urethral smears (Male)	..	..	..	254		Faeces—					
Sputum	..	..	..	604		Occult blood	..	..	165		
Skin lesions for M. leprae	..	..	..	85		Fat estimation	..	..	3		
Nasal smears for M. leprae	..	..	..	191		Trypsin	..	..	2		
Skin lesions for fungus	..	..	..	29						170	
Gastric washings	..	..	..	132		Functional tests—					
Dark background for treponema	..	..	..	10		Fractional test meals..	..	..	59		
					1,810	Reaction to histamine	..	..	47		
Cultures—						Glucose tolerance tests	..	..	65		
For M. tuberculosis—						Urea concentration tests	..	..	7		
Urine	..	..	..	82		Urea clearance tests	..	..	1		
Cerebro-spinal fluids	..	..	..	42		Bromsulphthalein tests	..	..	2		
Sputum	..	..	..	126		Water concentration tests	..	..	1		
Pus and exudate	..	..	..	22						182	
Gastric washings	..	..	..	29		9. Animal Inoculations—					
Others	..	..	..	8	309	Toads for pregnancy tests	..	..	121		
						Guinea pigs for leptospira	..	..	2		
General Cultures—										123	
Urine	..	..	..	419		10. Rats for Plague	..	..	49		
Blood	..	..	..	147						49	
Faeces	..	..	..	223		11. Forensic Specimens (Other than autopsies)—					
Pus and fluids	..	..	..	219		Examinations for blood stains—					
Throat swabs	..	..	..	521		Weapons	..	..	39		
Cerebro-spinal fluids	..	..	..	437		Clothing, etc.	..	..	111		
Vaginal and Urethral discharge	..	..	..	168		Scrapings, etc.	..	..	14		
Conjunctival swabs	..	..	..	8	2,142	Money	..	..	1		
						Examinations for seminal stains,					
Bacteriological examination of water etc.—						clothing, etc.	..	..	10		
Drinking water supplies	..	..	..	353		Blood grouping suspects, etc.	..	..	5		
Sea water baths	..	..	..	31		Vaginal swabs for spermatozoa	..	..	15		
Food	..	..	..	14						257	
Milk	..	..	..	1		12. Post Mortem Examinations—					
Ice Cream	..	..	..	8	407	Colonial War Memorial Hospital	..	..	80		
						Maternity Annexe	..	..	23		
6. Serology—						Mental Hospital	..	..	2		
Agglutination tests—						Tamavua Hospital	..	..	3		
For typhoid and paratyphoid	..	..	..	103		Police	..	..	55		
Brucellosis group	..	..	..	32		Others	..	..	1		
Weil-Felix	..	..	..	5						164	
Kahn Reactions	..	..	..	1,649							
Anti-streptolysin "O" titres	..	..	..	88	1,877						
						Total	..	..	....	46,644	



TABLE II  
CENTRAL LABORATORY, SUVA  
Principle Positive Findings, 1958

1. Histology—					
Acute inflammations	..	..	..	..	74
Chronic non-specific inflammations	..	..	..	..	33
Tuberculosis	..	..	..	..	33
Leprosy	..	..	..	..	8
Rheumatic tissues	..	..	..	..	3
Hyperplasia—					
Endometrium	..	..	..	42	
Prostate	..	..	..	10	
Breast	..	..	..	2	
					54
Products of conception	..	..	..	..	82
Tumours—					
Benign	..	..	..	82	
Malignant	..	..	..	84	
					166
Isolated myocarditis	..	..	..	..	2
2. Haematology—					
(14.6% gms = 100%)					
Hb. values—90% and over	..	..	..	..	1,521
80—89%	..	..	..	..	2,030
70—79%	..	..	..	..	1,988
60—69%	..	..	..	..	1,476
50—59%	..	..	..	..	831
40—49%	..	..	..	..	546
Less than 40%	..	..	..	..	391
Red cells, alteration in morphology—					
Anisocytosis	..	..	..	..	393
Poikilocytosis	..	..	..	..	268
Polychromasia	..	..	..	..	87
Nucleated Red cells	..	..	..	..	88
Punctate Basophilia	..	..	..	..	2
Polycythaemia	..	..	..	..	2
White Cells—					
Neutrophile Leucocytosis	..	..	..	..	440
Lymphocytosis	..	..	..	..	46
Eosinophilia	..	..	..	..	513
Leucopenia	..	..	..	..	5
Agranulocytosis	..	..	..	..	2
Infective mononucleosis	..	..	..	..	5
Leukaemia	..	..	..	..	11
Prolonged bleeding time	..	..	..	..	10
Long clotting time	..	..	..	..	7
Low platelet count	..	..	..	..	25
Marrow smears—					
Normoblastic erythropoiesis	..	..	..	..	57
Primitive normoblastic erythropoiesis	..	..	..	..	18
Megaloblastic erythropoiesis	..	..	..	..	17
Aplastic marrow	..	..	..	..	12
Blood Groups—					
(See separate table V) A	..	..	..	..	869
B	..	..	..	..	594
AB	..	..	..	..	165
O	..	..	..	..	1,054
Blood Sedimentation rates—					
mms per hour 10—20	..	..	..	..	431
21—30	..	..	..	..	448
31—40	..	..	..	..	367
41—50	..	..	..	..	299
51 and over	..	..	..	..	214
Under 10	..	..	..	..	204
3. Fertility Test—					
Aspermia	..	..	..	..	2
4. Parasitology—					
Faeces microscopic—					
Ova—Ankylostomes	..	..	..	..	1,171
Ascaris lumbricoides	..	..	..	..	314
Trichuris trichura	..	..	..	..	129
Interobius vermicularis	..	..	..	..	26
Cysts—Ent. histolytica					2
Ent. coli	..	..	..	..	66
Giardia lamblia:	..	..	..	..	10
Iodamobae butschlii	..	..	..	..	3
Protozoa—Ent. histolytica vegetative	..	..	..	..	10
Urine trichomonas vaginalis	..	..	..	..	10
Blood microfilariae	..	..	..	..	45
5. Bacteriology—					
Films—					
Vaginal and cervical smears, N. gonorrhoea	..	..	..	..	11
Urethral smears (male) N. gonorrhoea	..	..	..	..	88
Children—Vulva vaginitis, N. gonorrhoea	..	..	..	..	2
Sputum—					
M. Tuberculosis	..	..	..	..	15
Hansen's bacillus	..	..	..	..	3
Dark background examination—					
Tr. pallidum	..	..	..	..	1
Cultures—					
M. tuberculosis grown in—					
sputum	..	..	..	..	4
body fluids, etc.	..	..	..	..	4
gastric washings	..	..	..	..	1
cerebro-spinal fluids	..	..	..	..	2
General cultures—					
Urine—B. coli	..	..	..	..	52
Staphylococcus pyogenes	..	..	..	..	30
Streptococci	..	..	..	..	8
Other coliform organisms	..	..	..	..	4
Bllood—Staphylococcus pyogenes	..	..	..	..	1
Diplococcus pneumoniae	..	..	..	..	1
S. Paratyphi A	..	..	..	..	1
Salmonella paratyphi B	..	..	..	..	1
B. Coli	..	..	..	..	1
Faeces—Shigella flexneri V	..	..	..	..	9
Shigella flexneri W	..	..	..	..	1
Shigella ambigua (Schnitz's bacillus)	..	..	..	..	3
Staphylococcus pyogenes	..	..	..	..	2
Salmonella paratyphosum A	..	..	..	..	4
Pus and fluids etc.—					
Staphylococcus pyogenes	..	..	..	..	139
(penicillin sensitive 46)					
(penicillin resistant 77)					
(untested .. .. 16)					
Haemolytic streptococci	..	..	..	..	8
Pseudomonas aeruginosa	..	..	..	..	10
B. proteus	..	..	..	..	10
Other coliform organisms	..	..	..	..	5
Throat Swabs—					
Corynebacterium diphtheriae	..	..	..	..	9
Haemolytic streptococci	..	..	..	..	127
Streptococcus viridans	..	..	..	..	150
Diplococcus pneumoniae	..	..	..	..	17
Vincent's Angina (film)	..	..	..	..	1
Vaginal and urethral cultures—					
(Male) N. gonorrhoea	..	..	..	..	20
Staphylococcus pyogenes	..	..	..	..	19
(Female) N. gonorrhoea	..	..	..	..	4
Staphylococcus pyogenes	..	..	..	..	35
Haemolytic streptococcus	..	..	..	..	3
Conjunctival Swabs—					
N. gonorrhoea	..	..	..	..	6
Staphylococcus pyogenes	..	..	..	..	3
Cerebro-spinal fluids—					
H. influenzae	..	..	..	..	12
Diplococcus pneumoniae	..	..	..	..	14
Staphylococcus pyogenes	..	..	..	..	1
Haemolytic streptococci	..	..	..	..	1
6. Serology—					
Diagnostic titres for—					
Salmonella typhi	..	..	..	..	4
„ paratyphi A	..	..	..	..	11
„ paratyphi B	..	..	..	..	5
					20
Kahan Reactions—					
(See separate table III)					
Strong positive	..	..	..	..	54
Positive	..	..	..	..	60
Weak positive	..	..	..	..	188
					302
Anti-streptolysin O titres—					
50	..	..	..	..	3
100	..	..	..	..	7
125	..	..	..	..	11
166	..	..	..	..	13
250	..	..	..	..	13
230	..	..	..	..	13
500	..	..	..	..	4
625 and over	..	..	..	..	13
					77

7. Biochemistry—					Cerebro-spinal fluid—						
Blood and Serum—					Pandy test positive .. .. .					138	
High urea and non-protein nitrogens ..					Protein high .. .. .					144	
High single blood sugar—Fasting .. 52					Sugar low .. .. .					19	
Random .. 73					Chlorides low .. .. .					5	
					Cells increased—Neutrophiles ..					39	
					Lymphocytes ..					89	
High cholesterol .. .. .										—	128
,, uric acid .. .. .					Faeces—						
,, calcium .. .. .					Occult blood present .. .. .						114
,, acid phosphatase .. .. .					Functional tests—						
Van den Bergh Reaction—					Glucose tolerance tests—diabetic .. ..					19	
Direct positive .. .. .					Fractional test meals—						
Indirect positive .. .. .					Hyperchlohydria .. .. .					2	
					Histamine free achlohydria .. .. .					13	
Bilirubin high .. .. .					8. Animal inoculations—						
Thymol turbidity high .. .. .					Toads, pregnancy test—positive .. ..					11	
Icterus index high .. .. .					9. Forensic Medicine—						
Urine—					Human blood stains—						
Protein present .. .. .					Weapons .. .. .					10	
Sugar present .. .. .					Clothing etc. .. .. .					50	
Acetone present .. .. .					Scrapings .. .. .					4	
Bile present .. .. .										—	64
Blood present .. .. .					Human seminal stains—						
Pus present .. .. .					Clothing .. .. .					10	10
Casts present .. .. .					Human hairs .. .. .						9
No excretion of ascorbic acid .. ..											

TABLE III  
KAHN REACTIONS, 1958

		Negative	Weak Positive	Positive	Strong Positive	Total %	Positive	Strong Positive
Indians	..	885	80	23	27	1,015	8%	5%
Fijians	..	217	89	27	22	355	25%	14%
Europeans	..	169	3	2	..	174	1%	1%
Other	..	76	16	8	5	105	15%	12%
Total	..	1,347	188	60	54	1,649	49%	32%

TABLE IV  
SENDERS OF SPECIMENS 1958

	C.W.M.H.		Out-Patient Dept.	Annexe	A.N.C.	Other Hospitals	Other Govt. Depts.	Health Office	P. Practitioners	Services	Police	Suva C.C.	Lab.	Other Terris.
	Medical wards	Surg. wards												
Haematology and Serology ..	4,859	2,277	2,968	2,174	768	621	323	118	495	549	..	..	445	..
Bacteriology ..	2,937	1,020	1,954	505	14	407	149	380	175	172	..	..	24	..
Biochemistry ..	1,462	433	256	160	..	229	4	1	40	25	..	..	4	..
Grouping ..	467	1,444	..	486	..	..	..	..	11	104	..	..	138	..
Stools ..	1,206	521	1,120	55	..	249	304	368	246	629	..	..	..	..
Histology ..	6	798	39	5	..	173	2	..	2	3	..	..	249	..
Food and Water etc.	..	..	..	..	..	..	..	386	..	15	..	87	..	21
Forensic specimens ..	..	..	..	..	..	..	8	..	..	..	249	..	..	..
Post Mortem Examinations ..	80	..	..	23	..	5	..	1	..	..	55	..	..	..
	11,017	6,493	6,337	3,408	782	1,684	790	1,254	969	1,497	304	87	860	21

TABLE V  
BLOOD GROUPS BY RACE

	Group 0	% of Total	A	% of Total	B	% of Total	AB	% of Total	Total
Indians ..	474	37%	390	30%	384	30%	38	3%	1,286
Fijians ..	372	40%	307	32%	152	17%	102	11%	933
Europeans ..	144	41%	140	40%	47	14%	17	5%	348
Others ..	64	53%	32	27%	15	13%	8	7%	119





APPENDIX X  
CENTRAL MEDICAL SCHOOL

The following table shows the number of students enrolled for each course during the past nine years:—

Course	1950	1951	1952	1953	1954	1955	1956	1957	1958
Medical .. .. .	76	124	129	123	100	88	86	92	96
Dental .. .. .	2	23	30	23	31	28	16	14	9
Pharmacy .. .. .	5	5	9	6	6	6	4	2	4
Sanitation .. .. .	14	10	20	13	12	7	14	11	16
Laboratory .. .. .	5	6	12	8	8	10	6	4	7
Filariasis and Mosquito Control ..	16	14	21	9	8	24	....	....	....
X-Ray .. .. .	....	1	1	3	5	5	1	1	....
Dietetics .. .. .	....	....	....	....	....	....	2	3	2
Total .. .. .	118	183	222	185	170	168	129	127	134

2. The number of students from each territory at the close of the academic year is shown in the table below:—

Administration	Pre-Medical High School Course		MEDICAL										DENTAL		Total	
			1st Year		2nd Year		3rd Year		4th Year		5th Year		All Years			
	1957	1958	1957	1958	1957	1958	1957	1958	1957	1958	1957	1958	1957	1958	1957	1958
Gilbert and Ellice Islands Colony . . . .	..	3	3	..	1	3	..	1	..	..	..	..	..	..	4	7
British Solomon Islands Protectorate .. ..	1	2	2	3	..	..	..	..	..	..	2	1	..	..	5	6
Niue Island .. ..	1	..	..	1	..	..	..	..	..	..	2	..	..	..	3	1
Cook Islands .. ..	..	2	..	..	..	..	..	..	1	..	..	1	1	1	2	4
Tokelau Islands . . .	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2
American Samoa .. ..	2	1	2	2	..	2	..	..	..	..	1	..	..	..	5	5
Papua/New Guinea .. ..	9	8	8	7	4	2	..	4	2	..	..	2	3	3	26	26
Nauru Island .. ..	..	..	..	..	..	..	1	..	..	1	1	..	1	1	3	2
Tonga .. ..	..	..	..	1	..	..	..	..	..	..	..	..	2	1	2	2
New Hebrides .. ..	1	..	2	2	1	..	..	1	..	..	..	..	..	..	4	3
U.S.T.T. .. ..	5	..	..	3	..	..	..	..	2	..	..	2	..	..	7	5
Fiji .. ..	..	..	7	9	5	7	11	5	8	10	7	10	7	2	45	43
Total .. ..	19	18	24	28	11	14	12	11	13	11	13	16	14	8	106	106

3. Of the 16 students in the final year, 11 qualified at the end of the year and one qualified in May. One student was rusticated after three months, two more were referred for further study in 1959 and one was discharged without qualification. Of those who qualified, 8 were from Fiji, one from the British Solomon Islands Protectorate, 2 from Papua/New Guinea and one from the Cook Islands.

4. The only student in the final year of Dentistry was one from Fiji who had been referred from 1957, and he qualified in May, 1958.

5. Two medical students who were required to continue their studies in 1958 were both from Fiji. One was referred for six months and one for three.

6. An analysis of the students who left and did not continue the course is as follows:—  
*Preliminary Class 1958—*

- 3 were sent home as unsatisfactory
- 3 were transferred to other courses
- 1 was repatriated due to severe illness and
- 1 was repatriated during the course of the year at his own request.

In the *First Year of the Medical Course* by the time the examinations were finished, one was retired with severe illness, one was transferred to an ancillary course, 8 were discharged as unsuitable.

In the *Second Year Medical* one was expelled for disciplinary reasons.

*Third Year* had no losses.

In the *Fourth Year* one was rusticated for six months, but resigned eventually.

In the *Fifth Year* one was rusticated, as mentioned above, to return in 1959.

In the *Dental Course* in First Year, two were repatriated as unsuitable, the remainder stayed.

7. At the end of 1958 it continued to be apparent that many of the students entering the Pre-clinical Course were unable to prepare themselves adequately for first year proper in one year. In December, 1958, following the examinations, apart from those quoted above who were discharged or transferred to other courses, four were retained to continue preliminary education.



8. 1958 was a relatively quiet year for formal post-graduate instruction, as only two students from outside territories attended, both of these for a period of six months.

9. A number of distinguished visitors visited the School—

Sir Geoffrey Gibbs of the Nuffield Foundation

The Minister for Island Territories, New Zealand

The Governor of American Samoa, and at the end of the year

His Excellency the Governor of Fiji paid an official visit to the School.

As usual, we also had a number of distinguished scientific visitors, too numerous to mention in this appendix. We are most appreciative of the visits by administrators and scientists, all of whom help us in our work.

10. A.M.O. Ram Singh left early in the year to attend a twelve months fellowship in Anatomy at the Otago University, the fellowship being provided by World Health Organization. Dr. C. Petitpierre, World Health Organization lecturer in Physiology, resigned at the end of 1958. In November, Dr. Oldmeadow left the Colony after giving many years of honorary service in the teaching of obstetrics. It had been decided that a specialist in Obstetrics and Gynaecology should be added to the Medical Department's staff and he will, on arrival, take care of teaching of these subjects.

11. In the Dental Course, the intake in 1958 into the First Year of the course was three. One from the Preliminary Year, one transferred from A.M.O. I and the third admitted provisionally upon his passing the Senior Cambridge Examination. He had failed and his provisional admission was therefore cancelled. The other two failed at the end of the year and were repatriated. The Second Year of Dentistry had two students, one from Nauru and one from Papua/New Guinea. The third had four, one of whom was repatriated after four months and three completed the year. one from Fiji, one from Tonga and one from the Cook Islands. There were no fourth year dental students. It was decided towards the end of 1958 that once again the course would be reduced to three years, two years almost entirely confined to the basic sciences, Physiology and Anatomy and the third year to dental subjects. It was further decided that those students in the third year of dentistry should have their course completed if possible, in June, 1959.

12. *Training of Dental Ancillaries*: (1) *Assistant Dental Hygienist*—Two girls completed the two year course of training and joined the staff. A further two girls are in training.

(2) *Assistant Dental Mechanics*—One young man completed his course of training lasting  $2\frac{1}{2}$  years and joined the staff. No more students will be accepted until the need arises.

13. *General*—Once again we must express our gratitude to the large number of people who undertook the direction of the clinical teaching and other courses beyond pre-clinical years. These are all members of the various sections of the Medical Department in Suva and elsewhere. The beginnings of Social and Preventive Medicine occurred in December, 1958. Dr. T. G. Hawley was appointed as lecturer in that subject. It is hoped that the building of the Nuffield Clinic, which will be the headquarters of this department, will be completed early in 1959.

## APPENDIX XI

## NURSING DIVISION

Staffing of hospitals showed an improvement during the year, except for the latter part of the year when they were again below establishment.

2. Recruitment of Sisters was continued through New Zealand and Australia with a few local appointments of overseas trained personnel.

3. Five locally trained Nurses were appointed as Staff Nurses, having successfully passed the New Zealand Registered Nurses Examination.

4. Staffing of hospitals and districts by Colony trained Nurses also showed some improvement. It was necessary, however, to bring Nurses from the districts to hospitals to help during the poliomyelitis epidemic.

5. Much is still required to be done with regard to accommodation for Nurses in the districts, hospitals and Nursing Schools.

6. No new Nurses' Stations were opened during the year.

7. *Health Sisters' Conference*—The annual Health Sisters' Conference took place in the office of the Director of Medical Services in October.

8. *Nurses' and Midwives' Board*—The Nurses' and Midwives' Board met during October.

9. *Nursing Establishment*—

	<i>Posts</i>	<i>Filled</i>	<i>Vacant</i>
Nursing Superintendent ..	1	1	..
Matrons .. .. .	4	3	1
Assistant Matrons .. .. .	2	1	1
Sisters-in-Charge .. .. .	3	3	..
Health Sisters .. .. .	13	9	4
Sisters, Ward or Departmental .	54	43	11
Principal, Nursing School ..	1	1	..
Tutor Sisters .. .. .	6	5	1
Staff Nurses .. .. .	7	5	2
Senior Nurses .. .. .	62	49 (3 male)	10
Nurses .. .. .	285	263	22
Male Nurses .. .. .	21	18 (3 senior)	..
Appointment of New Zealand Sisters—			
2 year contract .. .. .	..	9	
Appointment of Australian Sisters—			
2 year contract .. .. .	..	11	
Appointment of Local Sisters—			
permanent .. .. .	..	7	
Appointment of Local Sisters—			
temporary .. .. .	..	12	
Appointment of Local Staff Nurses ..	..	5	
Total number accepted on 2 year contract ..		20	
Total number accepted on temporary appointment .. .. .		12	
Total number accepted on permanent appointment .. .. .		7	
Number completing contract .. .. .		12	
Number of resignations (including 2 temporary) .		13	
Number extending contract (3 months–1 year)		13	

10. *Fiji Qualified Nurses*—Total number of Nurses including female tuberculosis trained employed as at 31st December, 1958 was 312.

Employed in Hospitals ..	196	
Fijian and others .. ..	189	
Indians .. .. .	7	
Employed in Districts ..	116	
Fijian and others .. ..	110	
Indians .. .. .	6	
	<hr/>	<hr/>
	312	312
Total number of Nurses qualified during the year ..	..	53
New appointments .. .. .	..	53
Re-appointments .. .. .	..	20
Resumed duties following leave of absence ..	..	13
On leave of absence for one year ..	..	12
Resigned .. .. .	..	55
Absconded .. .. .	..	10
Duties terminated .. .. .	..	4
Deceased .. .. .	..	1
Admitted to Tamavua Chest Hospital ..	..	1
Promoted to senior grade .. .. .	..	4



## NURSING SCHOOLS

11. *Central Nursing School, Tamavua—*

<i>Trained Establishment</i>				<i>Posts</i>	<i>Filled</i>	<i>Vacant</i>
Principal	..	..	..	1	1	..
Tutors	..	..	..	4	3	1
Nurses	..	..	..	2	2	..

Number of students in training as at 31st December—181

Colony Curriculum	..	..	150
First year at Labasa Hospital	..	..	8
New Zealand Curriculum	..	..	23
			<hr/>
			181
			<hr/>

*Colony Curriculum—*

Number graduated May, 1958 (including 2 from New Zealand)	..	..	..	..	..	35
Number partial passes May, 1958	..	..	..	..	..	5
Number failed May, 1958	..	..	..	..	..	3
Number entered the School, February, 1958				..	..	67
Number left the School	..	..	..	..	..	41
Number transferred from New Zealand Curriculum				..	..	2

*School Roll includes—*

Fijians	..	..	..	..	..	141
Part-Europeans		..	..	..	..	1
Rotumans	..	..	..	..	..	9
Part-Chinese	..	..	..	..	..	1
Papua/New Guinea	..	..	..	..	..	4
Banabans	..	..	..	..	..	2
						<hr/>
						158
Number leaving the School	..	..	..	..	..	41

*New Zealand Course—*

Number in training as at 31st December	..	..	..	23
Entered the School, 1958	..	..	..	12
Graduated in June, 1958	..	..	..	5
Left during the year	..	..	..	3
Transferred to Colony training	..	..	..	2

*New Zealand Course Roll Includes—*

Fijians	..	..	..	..	..	15
Indians	..	..	..	..	..	6
Part-Europeans	..	..	..	..	..	2
						<hr/>
						23

*New Zealand Professional Examination—June, 1958—*

Pass	..	..	..	..	..	..	2
------	----	----	----	----	----	----	---

*New Zealand State Final Examination—June, 1958—*

Pass	..	..	..	..	..	..	5
Partial pass	..	..	..	..	..	..	2
Number leaving the School—	..	..	..	..	..	..	3

12. *Graduation*—On May 6th the Graduation Ceremony took place. Addresses were given by the Director of Medical Services and the Nursing Superintendent. Special prizes were presented by Lady Garvey.

13. On September 15th a small function was held to present the New Zealand medals to the 5 successful nurses from the New Zealand course. The Deputy Director of Medical Services spoke to the graduates and medals were presented by the Nursing Superintendent.

14. *Social*—The nurses have organized their evening social activities during the year, ending with a Christmas party.

15. *Sports*—Nurses continued to take an active interest in sport. Basketball was played in the Suva Senior Competition. Inter-Class Play continued each week through the season for the "Porter Cup" which was won by the New Zealand class. In athletics the nurses have formed their own Club instead of being associated with the Central Medical School.

16. *Lautoka Nursing School*—

<i>Trained Establishment</i>				<i>Posts</i>	<i>Filled</i>	<i>Vacant</i>
Tutors	..	..	..	2	1	1
Nurse	..	..	..	1	1	..
Number of students in training as at 31st December, 1958						82
Number of nurses graduated, May, 1958						18
Number of partial passes, May, 1958						5
Number failed, May, 1958						4
Number entered the School, February, 1958						35
Number leaving the School						18
<i>School Roll includes</i> —						
Fijians	..	..	..	..	..	72
Indians	..	..	..	..	..	9
Part-Europeans	..	..	..	..	..	1
						—
						82

17. *Graduation*—Graduation Ceremony took place on May 8th, 1958. Medals were presented by the Nursing Superintendent and the special prizes were presented by Mrs. J. A. C. Hill, wife of the District Commissioner.

18. *Social Activities*—Picnics were held at Saweni Beach during Easter and Christmas periods. The usual Graduation and Christmas parties were held.

19. *Sports*—Nurses continued to take an active part in basketball and athletics, which are the favourite recreational activities.

20. *Grand total (not including New Zealand curriculum)*—

Total number of nurses in training as at 31st December, 1958						240
Fijians	..	..	..	..	..	213
Indians	..	..	..	..	..	9
Part-Europeans	..	..	..	..	..	2
Rotumans	..	..	..	..	..	9
Papuans	..	..	..	..	..	4
Part-Chinese	..	..	..	..	..	1
Banabans	..	..	..	..	..	2
						—
						240
Total number accepted to the Schools						112
Total number graduated, May, 1958						53
Total number leaving the Schools						59
Admitted to Tamavua Hospital						3
Transferred from New Zealand Class						2

## HEALTH STAFF

21. *Establishment—Nursing*—

Health Sisters	..	..	..	..	..	..	13
Nurses	..	..	..	..	..	..	138

22. The 1958 programme of work was similar to that performed by the Health Sisters and Nurses in 1957.

23. *Health Sisters' Headquarters and Areas*—

<i>Name</i>	<i>Headquarters</i>				<i>Area</i>
Miss Ramsamuj	..	..	Suva Health Office	..	Suva City, Suva Rural to Kalokolevu via Queens Road, Colo-i-Suva via Princes Road to Laqari, Kalabo and Naliva village to Kings Road, Wailoku Hospital.
Miss J. Sinclair	..	..	Suva Health Office	..	Suva City, Suva Rural Schools to Davuilevu via Kings Road to Sawani via Princes Road.
Miss V. McKenzie (Health Sister)	..	..	Nausori	..	Rewa, Tailevu, Naitasiri, Kadavu
Vacant (Health Sister)	..	..	Nadroga	..	Nadroga, Navosa, Namosi
Miss B. Johnson	..	..	Lautoka Health Office	..	Lautoka, Yasawas, Nadi
Mrs. J. Cleary (Mobile Clinic)	..	..	Lautoka	..	Lautoka to beyond Korolevu on Queens Road and beyond Raki Raki via Kings Road
Vacant (Health Sister)	..	..	Ba	..	Ba Province
Vacant (Health Sister)	..	..	Nanukuloa	..	Ra Province
Mrs. A. Elsner (Health Sister)	..	..	Vatukoula	..	Vatukoula Obstetric Annexe Tavua, Nadarivatu, Vatukoula
Miss L. Hunter-Smith (Health Sister)	..	..	Labasa	..	Macuata, Bua
Vacant (Health Sister)	..	..	Savusavu	..	Cakaudrove
Not yet established (Health Sister)	..	..	Levuka	..	Lomaiviti, Lau, Kadavu



## SUVA HEALTH OFFICE

24. Health Sisters two (one Child Welfare, one School Health Sister).

## A—CHILD WELFARE DEPARTMENT

*Clinic Attendances—(including Mobile Clinic)—*

Europeans .. .. .	1,440
Part-Europeans .. .. .	1,209
Fijians .. .. .	14,000
Indians .. .. .	10,964
Chinese .. .. .	614
Others .. .. .	1,376
Total .. .. .	29,603

Children under 2 years seen at Health Office .. .. .	7,614
Children between 2 years and 5 years seen at Health Office .. .. .	4,194
Children under 2 years seen on Mobile Clinic .. .. .	8,855
Children between 2 years and 5 years seen on Mobile Clinic .. .. .	6,179
Stools sent to Laboratory .. .. .	121
Children treated for worms .. .. .	214
Smallpox vaccinations .. .. .	1,076
Vaccination inspections .. .. .	251
Anti-tetanus inoculations given .. .. .	1
Triple antigen inoculations given .. .. .	971
T.A.B. inoculations given .. .. .	411
Cholera inoculations given .. .. .	92
Inoculations against poliomyelitis given .. .. .	585
Approximate number of families first visits to Health Office .. .. .	3,731
Number of homes visited .. .. .	1,173
Number of children seen in homes .. .. .	2,057

## B—SCHOOLS HEALTH DIVISION

25. Number of children inspected and inoculated and treated at schools and in Health Clinic during 1958:—

Number of children medically inspected at schools .. .. .	13,061
Number of children given T.A.B. inoculations at schools .. .. .	5,857
Number of children treated for minor ailments at schools .. .. .	422
Number of children given T.A.B. inoculations at Health Office .. .. .	37
Number of children given A.T.S. injections at Health Office .. .. .	78
Number of children given penicillin injections at Health Clinic .. .. .	97
Number of children treated for minor ailments at Health Clinic .. .. .	6,107
Number of children treated for positive worms at Health Clinic .. .. .	73
Number of children treated for secondary yaws at Health Clinic .. .. .	5
Number of children treated for loss of weight .. .. .	44
Number of children given triple antigen at Health clinic .. .. .	66
Number of children given Polivirin at Health Clinic .. .. .	951
Number of children found with chickenpox at Health Clinic .. .. .	12
Number of children found with mumps at Health Clinic .. .. .	2
Number of children sent to Out-patients Department, Colonial War Memorial Hospital .. .. .	214
Number of children sent to Dental Clinic .. .. .	143
Number of children sent to X-Ray Department .. .. .	7
Number of children sent to Eye Clinic .. .. .	140
Number of children sent to Mobile X-Ray .. .. .	13
Approximate number of children with families first visits .. .. .	2,323

## C—DISPENSARIES

Number of patients seen at Nabua Dispensary, Wailoku Hospital, Waiqanake .. .. .	12,194
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ACTIVITIES OF HEALTH SISTERS AND RURAL HEALTH NURSES  
BASED ON CENTRES OUTSIDE SUVA

	Lautoka	Labasa	Nadroga	Tavua	Ra	Rewa	Total
Attendances at Health Clinic ..	22,300	10,165	625	8,338	....	....	41,428
Schools visited .. .. .	54	57	53	11	36	37	248
Children examined in schools ..	9,445	4,301	6,227	16,258	{ 2,099 1,565	{ 9,208 67,849	144,079
Children seen in Clinics ..	15,996	7,542	3,589				
Smallpox vaccinations ..	681	....	18	82	....	....	781
Ante-natal examinations ..	3,432	*1,356	855	3,331	1,926	3,881	14,781
Homes visited .. .. .	63	....	....	192	89	74	418
Typhoid inoculations ..	6,504	3,656	883	5,252	2,289	7,197	25,781
Diphtheria, Whooping Cough and Tetanus injection ..	1,838	1,693	448	1,941	....	3,800	10,009
Family Planning Clinic ..	....	176	....	....	....	....	....

\* Ante-natal clinic held at the Hospital last six months of year

APPENDIX XII

NOTIFICATION OF INFECTIOUS DISEASES BY RACE FOR THE YEAR 1958

Disease	Europeans	Part-Europ.	Fijians	Indians	Others	Totals
1. Ankylostomiasis .. .. .	1	6	94	81	5	187
2. Anthrax .. .. .	....	....	....	....	....	....
3. Beriberi .. .. .	....	....	....	....	....	....
4. Cerebro-Spinal Meningitis ..	....	....	1	....	....	1
5. Chicken Pox (Varicella) .. ..	33	13	286	68	72	472
6. Dengue Fever .. .. .	1	....	3	4	....	8
7. Diphtheria .. .. .	....	1	8	3	1	13
8. Dysentery—						
(a) Amoebic .. .. .	1	....	2	9	....	12
(b) Bacillary .. .. .	1	2	30	40	....	73
(c) Unclassified .. .. .	....	2	30	46	....	78
9. Encephalitis Lethargica .. ..	....	....	....	....	....	....
10. Erysipelas .. .. .	....	....	....	1	....	1
11. Infantile Diarrhoea .. .. .	4	27	1,116	766	78	1,991
12. Infective Hepatitis .. .. .	4	5	55	140	75	279
13. Influenza .. .. .	57	169	6,984	3,450	966	11,626
14. Leprosy .. .. .	....	4	12	17	1	34
15. Leptospirosis .. .. .	....	....	....	....	....	....
16. Malaria .. .. .	1	....	2	....	....	3
17. Measles (German) .. .. .	1	....	....	....	....	1
18. Measles (Morbilli) .. .. .	8	....	6	1	....	15
19. Mumps .. .. .	12	11	59	88	17	187
20. Poliomyelitis .. .. .	32	9	96	183	8	328
21. Puerperal Fever .. .. .	....	1	31	74	....	106
22. Scarlet Fever .. .. .	....	....	....	2	....	2
23. Tetanus .. .. .	....	....	33	21	2	56
24. Trachoma .. .. .	....	20	149	31	15	215
25. Tuberculosis—Pulmonary ..	10	6	469	117	31	633
Tuberculosis—Other forms ..	1	1	65	19	4	90
26. Typhoid Fever—						
(a) Enteric .. .. .	....	....	8	2	....	10
(b) Paratyphoid Fever ..	....	1	18	....	....	19
27. Undulant Fever .. .. .	....	....	....	....	....	....
28. Venereal Diseases—						
(a) Climatic Bubo .. .. .	....	....	....	....	....	....
(b) Gonorrhoea .. .. .	9	25	176	110	15	335
(c) Gon. Ophthalmia includ- ing Neonatorum .. .. .	....	....	4	1	....	5
(d) Soft Chancre .. .. .	....	....	....	1	....	1
(e) Syphilis .. .. .	....	....	1	9	....	10
(f) Venereal Granuloma ..	....	....	....	....	....	....
(g) Others .. .. .	....	....	....	....	....	....
29. Whooping Cough (Pertussis) ..	1	21	493	445	40	1,000
30. Yaws .. .. .	....	2	82	31	20	135

APPENDIX XIII

VITAL STATISTICS

(1) ESTIMATED POPULATION AT 31st DECEMBER, 1958

Race	Male	Female	Total	(1957)	Difference	Per cent increase	Population per sq. mile
Fijians .. .. .	80,110	77,698	157,808	153,356	4,452	+ 2.9	22
Indians .. .. .	95,575	88,515	184,090	177,247	6,843	+ 3.9	26
Europeans .. .. .	4,946	4,041	8,987	7,998	989	+ 12.4	1
Part-Europeans .. .. .	4,238	4,035	8,273	8,038	235	+ 2.9	1
Other Islanders .. .. .	3,043	2,754	5,797	5,401	396	+ 7.3	density of less than 1 person per sq. mile.
Rotumans .. .. .	2,375	2,333	4,708	4,586	122	+ 2.7	
Chinese .. .. .	2,780	1,765	4,545	4,348	197	+ 4.5	
Others .. .. .	16	60	76	64	12	+ 19	
Totals .. .. .	193,083	181,201	374,284	361,038	13,246	+ 3.7	53



## (2) BIRTHS RECORDED DURING YEARS 1955-1958

Race	1955	1956	1957	1958	1957 Population (Census)	Crude Birth- rate 1958 per mille of 1957 population
Fijians .. ..	5,017	5,378	5,933	5,587	153,356	36
Indians .. ..	7,127	7,679	7,928	8,196	177,247	46
Europeans .. ..	148	155	181	193	7,998	24
Part-Europeans .. ..	241	272	240	278	8,038	35
Rotumans .. ..	166	213	171	159	4,586	35
Other Islanders .. ..	194	190	225	217	5,401	40
Chinese .. ..	153	134	164	171	4,348	39
Others .. ..	21	35	3	4	64	..
Totals ..	13,067	14,056	14,845	14,805	361,038	41

## (3) DEATHS RECORDED DURING YEARS 1955-1958

Race	1955	1956	1957	1958	1957 Population (Census)	Crude death-rate per mille of 1957 population
Fijians .. ..	1,411	1,136	1,309	1,193	158,356	8
Indians .. ..	1,193	1,241	1,114	1,204	177,247	7
Europeans .. ..	30	43	45	44	7,998	6
Part-Europeans .. ..	34	38	39	43	8,038	5
Rotumans .. ..	53	65	46	37	4,586	8
Other Islanders .. ..	51	48	69	45	5,401	8
Chinese .. ..	15	21	27	18	4,348	4
Others .. ..	1	3	2	....	64	....
Totals ..	2,788	2,595	2,651	2,584	361,038	7

## (4) MARRIAGES, BIRTHS, DEATHS AND NATURAL INCREASE—1958

Race	Marriages	Births	Deaths	Net Increase	1957 Population (Estimate)	Increase per mille
Fijians .. ..	1,144	5,587	1,193	4,394	153,356	29
Indians .. ..	1,489	8,196	1,204	6,992	177,247	39
Europeans .. ..	53	193	44	149	7,998	19
Part-Europeans .. ..	58	278	43	235	8,038	29
Rotumans .. ..	20	159	37	122	5,401	23
Other Islanders .. ..	51	217	45	172	4,586	38
Chinese .. ..	23	171	18	153	4,348	35
Others .. ..	1	4	....	....	64	....
Totals ..	2,839	14,805	2,584	12,217	361,038	34

## (5) INFANT AND CHILD MORTALITY

	Births	DEATHS UNDER 5 YEARS						Infant Mortality Rate per mille
		Under 1	1-2	2-3	3-4	4-5	Total	
1956—Fijians .. ..	5,378	259	85	31	11	15	401	48
Indians .. ..	7,679	342	29	21	8	7	407	45
1957—Fijians .. ..	5,933	251	134	40	23	28	476	42
Indians .. ..	7,928	282	35	13	16	7	353	36
1958—Fijians .. ..	5,587	211	82	34	19	17	363	38
Indians .. ..	8,196	345	19	14	6	9	393	42

Note: Registrar-General has stigmatised Fijian 1958 figures as unreliable

APPENDIX XIV

Return of Diseases and Deaths for the year 1958, at the Colonial War Memorial Hospital, Tamavua, Lautoka, Labasa and Levuka Hospitals.

NOTE.—This classification is based on the International Classification of Diseases, WHO 1955.

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Others	Totals	Deaths
I—INFECTIVE AND PARASITIC DISEASES								
A 1	001-008	Tuberculosis of respiratory system .. .. .	24	557	184	40	805	45
A 2	010	Tuberculosis of meninges and central nervous system ..	1	11	4	..	16	10
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands ..	..	6	2	1	9	1
A 4	012, 013	Tuberculosis of bones and joints .. .. .	..	29	10	..	39	..
A 5	014-019	Tuberculosis, all other forms .. .. .	2	31	4	4	41	4
A 6	020	Congenital syphilis .. .. .	..	2	4	..	6	1
A 7	021	Early syphilis .. .. .	..	1	..	..	1	..
A 8	024	Tabes dorsalis .. .. .	..	..	..	..	..	..
A 9	025	General paralysis of insane .. .. .	..	..	..	..	..	..
A 10	022, 023 026-029	All other syphilis .. .. .	..	..	4	..	4	..
A 11	030-035	Gonococcal infections .. .. .	..	7	2	..	9	..
A 12	040	Typhoid fever .. .. .	..	5	2	..	7	1
A 13	041, 042	Paratyphoid fever and other Salmonella infections ..	1	1	..	..	2	..
A 14	043	Cholera .. .. .	..	..	..	..	..	..
A 15	044	Brucellosis (undulant fever) .. .. .	..	..	..	..	..	..
A 16 (a)	045	Bacillary dysentery .. .. .	..	7	19	..	26	2
(b)	046	Amoebiasis .. .. .	2	13	24	3	42	1
(c)	047, 048	Other unspecified forms of dysentery .. .. .	4	6	7	1	18	..
A 17	050	Scarlet fever .. .. .	..	..	1	..	1	..
A 18	051	Streptococcal sore throat .. .. .	..	..	3	..	3	..
A 19	052	Erysipelas .. .. .	..	..	..	..	..	..
A 20	053	Septicaemia and pyaemia .. .. .	1	..	..	..	1	1
A 21	055	Diphtheria .. .. .	..	..	8	1	9	4
A 22	056	Whooping cough .. .. .	1	1	2	1	5	..
A 23	057	Meningococcal infections .. .. .	2	6	3	..	11	5
A 24	058	Plague .. .. .	..	..	..	..	..	..
A 25	060	Leprosy .. .. .	..	..	6	..	6	..
A 26	061	Tetanus .. .. .	..	13	28	2	43	20
A 27	062	Anthrax .. .. .	..	..	..	..	..	..
A 28	080	Acute poliomyelitis .. .. .	24	55	157	2	238	10
A 29	082	Acute infectious encephalitis .. .. .	3	3	1	..	7	2
A 30	081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis .. .. .	..	..	1	1	2	1
A 31	084	Smallpox .. .. .	..	..	..	..	..	..
A 32	085	Measles .. .. .	..	..	..	..	..	..
A 33	091	Yellow fever .. .. .	..	..	..	..	..	..
A 34	092	Infectious hepatitis .. .. .	11	8	30	3	52	1
A 35	094	Rabies .. .. .	..	..	..	..	..	..
A 36 (a)	100	Louse-borne epidemic typhus .. .. .	..	..	..	..	..	..
(b)	101	Flea-borne endemic typhus (murine) .. .. .	..	..	..	..	..	..
(c)	104	Tick-borne epidemic typhus .. .. .	..	..	..	..	..	..
(d)	105	Mite-borne typhus .. .. .	..	..	..	..	..	..
(e)	102, 103 106-108	Other and unspecified typhus .. .. .	..	..	..	..	..	..
A 37 (a)	110	Vivax malaria (benign, tertian) .. .. .	1	1	1	..	3	..
(b)	111	Malariae malaria (quartan) .. .. .	..	1	..	..	1	..
(c)	112	Falciparum malaria (malignant tertian) .. .. .	1	..	..	..	1	..
(d)	115	Blackwater fever .. .. .	..	..	..	..	..	..
(e)	113, 114 116, 117	Other and unspecified forms of malaria .. .. .	..	..	..	..	..	..
A 38 (a)	123-0	Schistosomiasis vesical ( <i>S. haematobium</i> ) .. .. .	..	..	..	..	..	..
(b)	123-1	Schistosomiasis intestinal ( <i>S. Mansoni</i> ) .. .. .	..	..	..	..	..	..
(c)	123-2	Schistosomiasis pulmonary ( <i>S. japonicum</i> ) .. .. .	..	..	..	..	..	..
(d)	123-3	Other and unspecified schistosomiasis .. .. .	..	..	..	..	..	..
A 39	125	Hydatid disease .. .. .	..	..	..	..	..	..
A 40 (a)	127	Onchocerciasis .. .. .	..	..	..	..	..	..
(b)		Loiasis .. .. .	..	..	..	..	..	..
(c)		Filariasis ( <i>bancrofti</i> ) .. .. .	..	25	5	2	30	..
(d)		Other filariasis .. .. .	..	..	..	..	..	..
A 41	129	Ankylostomiasis .. .. .	1	13	17	1	32	..
A 42 (a)	126	Tapeworm (infestation) and other cestode infestations ..	1	..	..	..	1	..
(b)	130-0	Ascariasis .. .. .	..	2	6	1	9	..
(c)	130-3	Guinea worm ( <i>dracunculosis</i> ) .. .. .	..	..	..	..	..	..
(d)	124, 128 130-1, 130-2	Other diseases due to helminths .. .. .	..	1	1	..	2	..
A 43 (a)	037	Lymphogranuloma venereum .. .. .	..	3	3	..	6	..
(b)	038	Granuloma inguinale, venereal .. .. .	1	1	6	..	8	..
(c)	039	Other and unspecified venereal diseases .. .. .	..	..	..	..	..	..
(d)	049	Food poisoning infection and intoxication .. .. .	2	5	2	..	9	1
(e)	071	Relapsing fever .. .. .	..	..	..	..	..	..



Intermediate List Number		Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Others	Totals	Deaths
	(f)	072	Leptospirosis icterohaemorrhagica (Weil's disease) ..	..	..	..	..	..	..
	(g)	073	Yaws .. .. .	..	1	2	1	4	..
	(h)	087	Chickenpox .. .. .	..	2	..	..	2	..
	(i)	090	Dengue .. .. .	..	4	..	..	4	..
	(j)	095	Trachoma .. .. .	..	..	..	..	..	..
	(k)	096.7	Sandfly fever .. .. .	..	..	..	..	..	..
	(l)	120	Leishmaniasis .. .. .	..	..	..	..	..	..
	(m)	121 (a)	Trypanosomiasis gambiensis .. .. .	..	..	..	..	..	..
		(b)	Trypanosomiasis rhodesiensis .. .. .	..	..	..	..	..	..
		(c)	Other and unspecified Trypanosomiasis .. .. .	..	..	..	..	..	..
	(n)	131	Dermatophytosis .. .. .	..	..	..	..	..	..
	(o)	135	Scabies .. .. .	1	10	3	1	15	..
	(p)	036, 054, 059, 063, 064, 070, 074, 086, 088, 089, 093, 096.1-096.6, 096.8, 096.9, 122, 132-134, 136-138	All other diseases classified as infective and parasitic ..	3	10	6	1	20	..
II—NEOPLASMS									
A	44	140-148	Malignant neoplasm of buccal cavity and pharynx ..	1	1	2	1	5	1
A	45	150	Malignant neoplasms of oesophagus .. .. .	..	4	1	..	5	1
A	46	151	Malignant neoplasm of stomach .. .. .	..	6	10	1	17	4
A	47	152, 153	Malignant neoplasm of intestine, except rectum ..	5	2	5	1	13	..
A	48	154	Malignant neoplasm of rectum .. .. .	..	..	2	3	5	3
A	49	161	Malignant neoplasm of larynx .. .. .	..	..	..	..	..	..
A	50	162, 163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary .. .. .	1	3	2	3	9	5
A	51	170	Malignant neoplasm of breast .. .. .	1	5	1	..	7	..
A	52	171	Malignant neoplasm of cervix uteri .. .. .	..	7	12	2	21	5
A	53	172-174	Malignant neoplasm of other and unspecified parts of uterus ..	1	3	2	..	6	1
A	54	177	Malignant neoplasm of prostate .. .. .	..	2	1	..	3	2
A	55	190, 191	Malignant neoplasm of skin .. .. .	8	2	2	..	12	..
A	56	196, 197	Malignant neoplasm of bone and connective tissue ..	..	5	3	..	8	..
A	57	155, 160, 164, 165, 175, 176, 178-181, 192-195, 198, 199	Other and unspecified sites .. .. .	13	21	14	1	49	23
A	58	204	Leukaemia and aleukaemia .. .. .	..	3	3	..	6	3
A	59	200-203, 205	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system .. .. .	1	5	4	..	10	2
A	60	210-239	Benign neoplasms and neoplasms of unspecified nature ..	14	38	66	4	122	8
III—ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES									
and									
IV—DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS									
A	61	250, 251	Nontoxic goitre .. .. .	1	1	13	..	15	..
A	62	252	Thyrotoxicosis with or without goitre .. .. .	2	3	9	1	15	..
A	63	260	Diabetes mellitus .. .. .	9	27	170	6	212	10
A	64 (a)	280	Beriberi .. .. .	..	..	2	..	2	..
	(b)	281	Pellagra .. .. .	..	..	1	..	1	..
	(c)	282	Scurvy .. .. .	..	..	1	..	1	..
	(d)	283-286	Other deficiency states .. .. .	3	18	21	..	42	5
A	65 (a)	290	Pernicious and other hyperchromic anaemias ..	1	5	26	1	33	1
	(b)	291	Iron deficiency anaemias (hypochromic) .. .. .	2	9	103	2	116	3
	(c)	292, 293	Other specified and unspecified anaemias .. .. .	3	4	21	1	29	3
A	66 (a)	241	Asthma .. .. .	3	12	62	..	77	2
	(b)	240, 242-245, 253, 254, 270-277, 287-289, 294-299	All other allergic disorders endocrine, metabolic and blood diseases .. .. .	5	17	48	2	72	..
V—MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS									
A	67	300-309	Psychoses .. .. .	10	24	46	5	85	..
A	68	310-324, 326	Psychoneuroses and disorders of personality ..	5	17	23	..	45	..
A	69	325	Mental deficiency .. .. .	..	5	10	..	15	3

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths
VI—DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS								
A 70	330-334	Vascular lesions affecting central nervous system .. .. .	..	12	41	1	54	23
A 71	340	Nonmeningococcal meningitis .. .. .	3	24	12	1	40	11
A 72	345	Multiple sclerosis .. .. .	..	3	1	..	4	..
A 73	353	Epilepsy .. .. .	3	5	15	1	24	..
A 74	370-379	Inflammatory diseases of eye .. .. .	2	62	53	6	123	..
A 75	385	Cataract .. .. .	3	21	106	5	135	..
A 76	387	Glaucoma .. .. .	1	2	12	5	20	..
A 77 (a)	390	Otitis externa .. .. .	6	1	2	..	9	..
(b)	391-393	Otitis media and mastoiditis .. .. .	..	13	9	..	22	1
(c)	394	Other inflammatory diseases of ear .. .. .	..	2	1	..	3	..
A 78 (a)	380-384, 386, 388, 389	} All other diseases and conditions of eye .. .. .	4	25	36	4	69	..
(b)	341, 344 350-352, 360-369 395-398	} All other diseases of the nervous system and sense organs .. .. .	7	21	24	2	54	5
VII—DISEASES OF THE CIRCULATORY SYSTEM								
A 79	400-402	Rheumatic fever .. .. .	4	16	134	8	162	2
A 80	410-416	Chronic rheumatic heart disease .. .. .	6	28	90	6	130	17
A 81	420-422	Arteriosclerotic and degenerative heart disease .. .. .	17	18	98	2	135	37
A 82	430-434	Other diseases of heart .. .. .	8	17	72	4	101	24
A 83	440-443	Hypertension with heart disease .. .. .	8	9	66	4	87	12
A 84	444-447	Hypertension without mention of heart .. .. .	13	7	51	..	71	1
A 85	450-456	Disease of arteries .. .. .	2	6	24	..	32	9
A 86	460-468	Other diseases of circulatory system .. .. .	14	31	31	1	77	3
VIII—DISEASES OF THE RESPIRATORY SYSTEM								
A 87	470-475	Acute upper respiratory infections .. .. .	24	29	63	3	119	1
A 88	480-483	Influenza .. .. .	5	35	52	2	94	..
A 89	490	Lobar pneumonia .. .. .	13	125	107	10	255	10
A 90	491	Bronchopneumonia .. .. .	13	138	164	13	328	40
A 91	492, 493	Primary atypical, other and unspecified pneumonia .. .. .	3	10	18	1	32	3
A 92	500	Acute bronchitis .. .. .	3	43	44	7	97	..
A 93	501, 502	Bronchitis, chronic and unqualified .. .. .	7	5	14	2	28	1
A 94	510	Hypertrophy of tonsils and adenoids .. .. .	29	7	51	2	89	..
A 95	518, 521	Empyema and abscess of lung .. .. .	2	4	4	..	10	1
A 96	519	Pleurisy .. .. .	..	8	14	..	22	..
A 97 (a)	523	Pneumoconiosis .. .. .	..	..	..	..	..	..
(b)	511-517, 520-522, 524-527	} All other respiratory diseases .. .. .	14	49	44	10	117	8
IX—DISEASES OF THE DIGESTIVE SYSTEM								
A 98 (a)	530	Dental Caries .. .. .	..	2	2	..	4	..
(b)	531-535	All other diseases of teeth and supporting structures .. .. .	2	5	6	..	13	..
A 99	540	Ulcer of stomach .. .. .	13	12	42	5	72	3
A 100	541	Ulcer of duodenum .. .. .	7	20	47	4	78	..
A 101	543	Gastritis and duodenitis .. .. .	6	23	67	6	102	1
A 102	550-553	Appendicitis .. .. .	44	41	117	8	210	1
A 103	560, 561, 570	Intestinal obstruction and hernia .. .. .	16	48	85	2	151	2
A 104 (a)	571-0	Gastro-enteritis and colitis between 4 weeks and 2 years .. .. .	4	26	50	2	82	12
(b)	571-1	Gastro-enteritis and colitis, ages 2 years and over .. .. .	9	37	44	6	96	6
(c)	572	Chronic enteritis and ulcerative colitis .. .. .	3	1	4	..	8	..
A 105	581	Cirrhosis of liver .. .. .	2	13	10	..	25	10
A 106	584, 585	Cholelithiasis and cholecystitis .. .. .	4	9	57	..	70	..
A 107	536-539 542, 544, 545, 573-580, 582, 583, 586, 587	} Other diseases of digestive system .. .. .	30	64	111	8	213	14



Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths
X—DISEASES OF THE GENITO-URINARY SYSTEM								
A 108	590	Acute nephritis .. .. .	4	17	21	..	42	3
A 109	591-594	Chronic, other and unspecified nephritis .. .. .	..	19	28	2	49	11
A 110	600	Infections of kidney .. .. .	14	37	131	5	187	2
A 111	602, 604	Calculi of urinary system .. .. .	18	5	72	3	98	..
A 112	610	Hyperplasia of prostate . .. .	7	4	23	1	35	3
A 113	620, 621	Diseases of breast . .. .	2	5	7	1	15	..
A 114 (a)	613	Hydrocele . .. .	7	34	17	2	60	..
(b)	634	Disorders of menstruation .. .. .	16	26	65	1	108	1
(c)	601, 603 605-609 611, 612 614-617 622-633 635-637	} All other diseases of the genito-urinary system .. .. .	42	80	179	12	313	3
XI—DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH AND THE PUERPERIUM								
A 115	640-641, 681, 682, 684	Sepsis of pregnancy, childbirth and the puerperium .. .. .	1	7	16	2	26	2
A 116	642, 652, 685, 686	Toxaemias of pregnancy and the puerperium . .. .	1	17	94	1	113	4
A 117	643, 644 670-672	Haemorrhage of pregnancy and childbirth .. .. .	6	16	64	3	89	4
A 118	650	Abortion without mention of sepsis or toxæmia .. .. .	17	52	187	12	268	1
A 119	651	Abortion with sepsis .. .. .	2	12	26	3	43	1
A 120 (a)	645-649 673-680	} Other complications of pregnancy, childbirth and the puerperium .. .. .	17	59	115	6	197	4
(b)	683, 687-689 660	Delivery without complications . .. .	158	845	2,123	254	3,380	2
XII—DISEASES OF THE SKIN AND CELLULAR TISSUE								
and								
XIII—DISEASES OF THE BONES AND ORGANS OF MOVEMENT								
A 121	690-698	Infections of skin and subcutaneous tissue .. .. .	36	230	203	18	487	2
A 122	720-725	Arthritis and spondylitis . .. .	9	31	53	2	95	2
A 123	726, 727	Muscular rheumatism and rheumatism unspecified .. .. .	6	5	28	1	40	..
A 124	730	Osteomyelitis and periostitis .. .. .	7	55	44	1	107	1
A 125	737, 745-749	Ankylosis and acquired musculo-skeletal deformities .. .. .	1	1	15	..	17	..
A 126 (a)	715	Chronic Ulcer of Skin (including tropical ulcer) .. .. .	6	4	12	1	23	..
(b)	700-714, 716	All other diseases of skin .. .. .	13	13	16	3	45	..
(c)	731-736, 738-744	} All other diseases of musculo-skeletal system .. .. .	9	43	26	2	80	.
XIV—CONGENITAL MALFORMATIONS								
A 127	751	Spina bifida and meningocele .. .. .	..	1	3	..	4	1
A 128	754	Congenital malformations of circulatory system .. .. .	..	2	7	..	9	2
A 129	750, 752, 753, 755-759	} All other congenital malformations .. .. .	3	13	41	..	57	6
XV—CERTAIN DISEASES OF EARLY INFANCY								
A 130	760, 761	Birth injuries .. .. .	..	2	3	..	5	..
A 131	762	Postnatal asphyxia and atelectasis .. .. .	..	..	2	..	2	..
A 132 (a)	764	Diarrhoea of newborn (under 4 weeks) . .. .	..	2	5	..	7	3
(b)	765	Ophthalmia neonatorum . .. .	..	1	..	..	1	..
(c)	763, 766-768	Other infections of newborn .. .. .	..	2	..	..	2	..
A 133	770	Haemolytic disease of newborn . .. .	..	1	..	1	2	..
A 134	769, 771, 772	All other defined diseases of early infancy .. .. .	..	10	10	..	20	7
A 135	773, 776	Ill-defined diseases peculiar to early infancy, and immaturity unqualified .. .. .	3	15	31	..	49	24

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Total	Deaths
		XVI—SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS						
A 136	794	Senility without mention of psychosis . . . . .	..	..	8	..	8	1
A 137 (a)	788·8	Pyrexia of unknown origin . . . . .	6	22	36	1	65	2
(b)	793	Observation, without need for further medical care . . . . .	53	170	401	14	638	..
(c)	780-787	} All other ill-defined causes of morbidity . . . . .	15	27	34	4	80	..
	788·1-788·7							
	788·9, 789-792, 795							

“ E ” CODE—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSE)

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths
AE 138	E810-E835	Motor vehicle accidents . . . . .	11	26	48	5	90	6
AE 139	E800-E802 E840-E866	} Other transport accidents . . . . .	4	14	22	5	45	1
AE 140	E870-E895	Accidental poisoning . . . . .	4	7	37	1	49	1
AE 141	E900-E904	Accidental falls . . . . .	28	112	185	14	339	5
AE 142	E912	Accident caused by machinery . . . . .	5	10	17	1	33	..
AE 143	E916	Accident caused by fire and explosion of combustible material	1	16	22	5	44	6
AE 144	E917, E918	Accident caused by hot substance, corrosive liquid, steam and radiation . . . . .	1	6	21	2	30	3
AE 145	E919	Accident caused by firearm . . . . .	1	1	5	..	7	..
AE 146	E929	Accidental drowning and submersion . . . . .	..	..	2	..	2	..
AE 147 (a)	E920	Foreign body entering eye and adnexa . . . . .	20	83	89	3	195	4
(b)	E923	Foreign body entering other orifice . . . . .	..	1	5	..	6	..
(c)	E927	Accidents caused by bites and stings of venomous animals and insects . . . . .	..	4	4	2	10	..
(d)	E928	Other accidents caused by animals . . . . .	..	3	17	..	20	..
(e)	E910, E911 E913-E915 E921-E922 E924-E926 E930-E965	} All other accidental causes . . . . .	13	69	54	5	141	3
AE 148	E970-E979	Suicide and self-inflicted injury . . . . .	1	2	16	1	20	1
AE 149	E980-E985	Homicide and injury purposely inflicted by other persons (not in war) . . . . .	7	38	63	8	116	3
AE 150	E990-E999	Injury resulting from operations of war . . . . .	..	1	..	..	1	..

“ N ” CODE—ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (NATURE OF INJURY)

Intermediate List Number	Detailed List Numbers	Cause Groups	Euro.	Fijian	Indian	Other	Totals	Deaths
AN 138	N800-N804	Fracture of skull . . . . .	11	37	34	5	88	9
AN 139	N805-N809	Fracture of spine and trunk . . . . .	9	18	18	1	46	2
AN 140	N810-N829	Fracture of limbs . . . . .	23	114	211	13	361	4
AN 141	N830-N839	Dislocation without fracture . . . . .	3	3	20	5	31	..
AN 142	N840-N848	Sprains and strains of joints and adjacent muscle . . . . .	2	7	15	2	26	..
AN 143	N850-N856	Head injury (excluding fracture) . . . . .	8	41	51	4	104	2
AN 144	N860-N869	Internal injury of chest, abdomen and pelvis . . . . .	4	8	14	1	27	4
AN 145	N870-N908	Laceration and open wounds . . . . .	14	71	104	7	196	2
AN 146	N910-N929	Superficial injury, contusion and crushing with intact skin surface . . . . .	9	17	27	1	54	..
AN 147	N930-N936	Effects of foreign body entering through orifice . . . . .	..	8	17	1	26	..
AN 148	N940-N949	Burns . . . . .	5	29	45	6	85	8
AN 149	N960-N979	Effects of poisons . . . . .	3	5	30	2	40	1
AN 150	N950-N959 N980-N999	} All other and unspecified effects of external causes . . . . .	2	35	22	2	61	1



## APPENDIX XV

URBAN/TOWNSHIP/RURAL SANITARY DISTRICTS OF FIJI—REPORT  
OF HEALTH INSPECTORS FOR THE YEAR 1958

## 1—SUMMARY OF INSPECTIONS

<i>Type of Premises, etc.</i>	<i>Inspections</i>	<i>Re-inspections</i>	<i>Total</i>
House-to-house Inspection of District .. ..	40,345	16,522	56,867
Investigation of Complaints, Nuisances, etc. ..	936	392	1,328
New Buildings Sites—before approval .. ..	1,245	299	1,544
New Buildings Works in Progress .. ..	3,086	996	4,082
Investigation of Infectious Disease and Disinfection	2,086	28	2,114
Shipping .. ..	292	....	292
Houses-let-as-Lodgings and Lodging Houses ..	1,108	436	1,544
Aircraft .. ..	649	2	651
Factories and Workshops .. ..	695	352	1,047
Cemeteries .. ..	98	38	136
Schools .. ..	530	191	721
Checking Sanitary Services (A/cs. etc.) .. ..	709	65	774
Laundries .. ..	1,171	321	1,492
Hairdressers, Chiropodist, etc. .. ..	1,037	664	1,701
Foodshops, Foodstores, Markets, etc. .. ..	3,801	1,996	5,797
Eating Houses and Ice Cream Premises .. ..	2,464	1,172	3,636
Aerated Water and Ice Factories .. ..	173	88	261
Kava Saloons .. ..	232	131	363
Bakehouses .. ..	646	372	1,018
Slaughterhouses .. ..	72	20	92
Butchers' Shops .. ..	404	226	630
Food vehicles .. ..	535	302	837
Cinema .. ..	74	9	83
Quarantine Islands .. ..	30	8	38
Septic Tanks .. ..	72	35	107
Sanitary Inspections of Local Vessels .. ..	99	22	121
Public Lavatories .. ..	1	....	1
Miscellaneous .. ..	2,415	233	2,648
Total .. ..	<u>65,005</u>	<u>24,920</u>	<u>89,925</u>

## 2—WRITTEN NOTICES, ETC., ISSUED

Intimation Notices served .. ..	6,587
Statutory Notices served .. ..	196
Buildings Surveyed for Closure or Demolition ..	41
Closing Orders Served .. ..	50
Demolition Orders Served .. ..	17
Notices of Closing Orders .. ..	40
Buildings Demolished after service of Orders—	
By owners .. ..	26
Notices of Intention to Demolish .. ..	20
	<u>6,977</u>

## 3—BUILDING APPLICATIONS DEALT WITH

	<i>Number</i>	<i>Value</i>
Applications in respect of New Buildings ..	3,270	£1,371,321 9 0
Applications in respect of Alterations and Repairs .. ..	304	55,635 0 0
Applications in respect of Septic Tanks ..	267	92,566 0 0
Total ..	<u>3,841</u>	<u>£1,519,522 9 0</u>

Buildings Completed and Passed during the year	1,303
Applications Outstanding in Register (work not completed)—	
New Buildings .. ..	3,619
Alterations and Repairs .. ..	687
Septic Tanks .. ..	120

## 4—SUMMARY OF SANITARY IMPROVEMENTS, ETC. (ALL TYPES OF PREMISES)

<i>Items</i>	<i>Ordered</i>	<i>Completed</i>
Repairing of Buildings .. .. .	572	223
Improvements to Lighting and Ventilation of Buildings .. .. .	228	125
Removal of Unauthorized Erections .. .. .	405	207
Abatement of Overcrowding .. .. .	171	74
New Privies (all types) .. .. .	2,744	1,470
Repairing, Cleansing or Flyproofing of Privies .. .. .	3,143	2,468
Filling in of Insanitary Privies .. .. .	1,460	967
New Bathrooms or Washing Places .. .. .	306	182
Repairing or Cleansing of Bathrooms or Washing Places .. .. .	597	401
New Kitchens .. .. .	169	31
Repairing or Cleansing of Kitchens .. .. .	420	361
Provision of New Drains .. .. .	643	505
Repairing or Cleansing of existing Drains .. .. .	2,554	1,947
New Wells .. .. .	112	68
Repairing or Improvement of Wells .. .. .	642	380
New Water Tanks .. .. .	44	54
Repairing, Screening or Cleansing of Water Tanks .. .. .	1,026	413
Removal of Accumulations of Refuse, etc. .. .. .	14,435	12,299
Clearing of Overgrowth or Long Grass .. .. .	5,823	3,647
Provision of Garbage Tins .. .. .	1,843	999
Abatement of Nuisances from Animals or Poultry .. .. .	2,380	1,045
Abatement of Mosquito Breeding .. .. .	2,890	2,181
Cleansing of Food Premises .. .. .	1,704	1,362
Structural Improvements to Food Premises .. .. .	720	558
Cleansing of Food Vehicles .. .. .	286	228
Improvements to Food Vehicles .. .. .	79	55
Cleansing or Improvement of Hairdressers' Premises .. .. .	335	239
Cleansing or Improvement of Laundries .. .. .	135	83
Cleansing or Improvement of Schools .. .. .	81	45
Cleansing or Improvement of Shipping .. .. .	....	....
Impounding of Straying Cattle .. .. .	4	4
Miscellaneous .. .. .	288	102
	<u>46,239</u>	<u>32,723</u>

## 5—MOSQUITO CONTROL

Premises Inspected for Mosquito Larvae .. .. .	62,583
Premises at which larvae was found .. .. .	2,870
Larval Index .. .. .	4.633 per cent

## 6—DISINFECTION, DISINFESTATION AND FUMIGATION

<i>Type of Premises or Vessel</i>	<i>Method</i>	<i>Number</i>
Overseas vessels—anti-malarial .. .. .	Aerosol Bombs .. .. .	70
Overseas vessels .. .. .	Cyanide .. .. .	1
Local vessels .. .. .	Cyanide .. .. .	74
Aircraft .. .. .	Aerosol Bombs .. .. .	646
Premises .. .. .	Dieldrin, D.D.T. & Pyagra and D.D.T. & Kerosene .. .. .	305
Clothing (Second-hand) .. .. .	Cyanide .. .. .	152
Miscellaneous .. .. .	Cyanide .. .. .	20
International Deratization Certificates Issued .. .. .		1
International Deratization Exemption Certificates Issued .. .. .		5

## 7—ANTI-RAT MEASURES

Poison Baits set (Warfarin) .. .. .	997
Traps Set .. .. .	8,498

	<i>Rattus Rattus</i>	<i>Rattus Norvegicus</i>	
Rats destroyed by poisoning .. .. .	587	293	880
Rats destroyed by trapping .. .. .	467	233	700
Rats destroyed by fumigation—			
Overseas shipping .. .. .	..	..	..
Local shipping .. .. .	13	26	39
Aircraft .. .. .	..	..	..
Rats submitted for Laboratory examination .. .. .	..	..	74
Rats Found Infected .. .. .	..	..	..



## 8—SUPERVISION OF LABOUR GANGS, ETC.

Number of men employed, clearing and draining work done, loads of refuse removed etc.—

Number of men employed	..	..	..	..	84
Clearing and draining work done in acres	..	..	..	..	21,563
Number of loads of refuse removed	..	..	..	..	1,490

## 9—FOOD INSPECTION AND SAMPLING

Unsound foodstuff condemned and destroyed in lb.—58,684 lb.

Food and Water Samples taken—

*Fresh Water :*

Number of samples taken for bacteriological examinations	..	318
Number of satisfactory samples	..	223
Number of chemical samples taken	..	3
Number of chemical samples satisfactory	..	3

*Sea Water :*

Number of sea water and baths samples	..	45
---------------------------------------	----	----

*Milk :*

Number of milk samples taken—

Genuine	..	7
Non-genuine	..	11

*Ice-Cream :*

Number of ice-cream samples taken—

Genuine	..	10
Non-genuine	..	7

*Meat Inspection :*

Carcases inspected	..	132
Condemned	..	4

## 10—LEGAL PROCEEDINGS

Defendants, Offences and Results of Action—

*Public Health Ordinance*

Cases	..	252
Convictions	..	251
Penalties	..	£677 8s. 6d.

*Pure Food Ordinance*

Cases	..	28
Convictions	..	27
Penalties	..	£154 11s. 6d.

## 11—REMARKS AND DETAILS OF ANY OTHER SPECIAL WORKS CARRIED OUT DURING THE YEAR UNDER REVIEW

Sanitation Campaign—

	<i>Number</i>	<i>Value</i>
Squatting slabs sold	798	£399 0 0
Latrine plugs sold	374	37 8 0
Pedestal sets sold	87	174 0 0
Pedestal seats sold	1	1 2 6
	<u>1,260</u>	<u>£611 10 6</u>

12. *Sea Port and Airport Health Quarantine*—The following are comparative figures in respect of shipping dealt with over the last five years:—

	1954	1955	1956	1957	1958
Ships given Pratique	206	222	240	281	317
Landing Passengers	2,385	2,902	6,972	6,081	3,461
Aircraft given Pratique	1,066	1,219	1,376	1,763	1,873
Landing Passengers	10,615	12,597	13,660	13,844	16,861
Local vessels fumigated	92	72	80	85	74
Overseas vessels fumigated	15	19	3	2	71
Aircraft treated with Aerosols	373	384	576	539	646
International Deratization Certificates	..	1	4	2	1
International Deratization Exemption Certificates	..	..	..	2	5

## APPENDIX XVI

## SUVA GAOL

During the year 1958, Dr. T. A. U. Clunie was visiting Medical Officer to Suva Gaol.

2. Regular weekly visits were made by the Medical Officer when he saw cases referred by the Assistant Medical Officer and patients admitted to the Infirmary ward.

3. Prison buildings, bakery and warders' compound were inspected regularly.

4. All new admissions to the Gaol were medically examined. The resident Assistant Medical Officer gave the routine daily medical attention to those attending the sick parade and a total of 1,850 persons were seen during the year.

5. *Infectious Diseases*—During the year 2 cases of influenza and 2 of poliomyelitis were notified. In the Warders' Compound there were 3 old cases of pulmonary tuberculosis, 1 admitted to Tamavua Hospital and 2 received treatment at the Gaol Dispensary. No active lesion was found among the contacts.

6. The following cases were referred to the Colonial War Memorial Hospital:—

- 1 Anaemia
- 1 Intoxication from drinking methylated spirits and shellac.
- 1 Renal calculus
- 1 for observation and investigation
- 1 Acute nephritis
- 1 Bruised lumbar region

Two patients were referred to Tamavua Tuberculosis Hospital for admission and there were 3 psychoses.

7. There were 2 judicial hangings and 1 corporal punishment during the year.



## APPENDIX XVII

## METEOROLOGICAL REPORTS

The following Meteorological Reports for the year 1958 have been supplied by the Meteorological Office:—

<i>Laucala Bay</i>				<i>Suva</i>			
Rainfall—				Rainfall—			
Total	..	..	115·90"	Total	..	..	124·97"
Normal for 14 years	..	..	117·83"	Normal for 69 years	..	..	124·25"
Departure from normal	..	..	—1·93"	Departure from normal	..	..	+0·72"
Wet days (0·01" or more)	..	..	194	Wet days (0·01" or more)	..	..	181
Wettest day on April 17th	..	..	9·25"	Wettest day on April 17th	..	..	10·68"
<i>Temperatures</i>				<i>Temperatures</i>			
Mean Maximum	..	..	83·1°F.	Mean Maximum	..	..	82·6°F.
Highest Recorded on February 14th	..	..	94·1°F.	Highest Recorded on February 24th	..	..	94·7°F.
Mean Minimum	..	..	71·2°F.	Mean Minimum	..	..	71·4°F.
Lowest Minimum on July 8th	..	..	58·5°F.	Lowest Minimum on July 10th	..	..	54·8°F.
Mean temperature $\frac{1}{2}$ (Max. + Min.)	..	..	77·2°F.	Mean Temperature $\frac{1}{2}$ (Max. + Min.)	..	..	77·0°F.
Departure from normal	..	..	+0·2°F.	Departure from normal	..	..	—0·2°F.
Mean Temperature at 9 a.m.	..	..	78·5°F.	Mean Temperature at 9 a.m.	..	..	78·5°F.
<i>Humidity</i>				<i>Humidity</i>			
Mean humidity at 9 a.m.	..	..	79%	Mean humidity at 9 a.m.	..	..	77%
<i>Bright Sunshine</i>							
Total Hours	..	..	2,129·0 hrs.				
Mean Daily	..	..	5·83 hrs.				

## NOTES

2. *General*—Although rainfall and temperature were close to the average there were some remarkable variations in individual months, particularly in regard to rainfall.

3. *Temperature*—The mean temperature was 0·2°F. below average at Suva and extremes ranged from 94·7°F. on February 24th to 54·8°F. on July 10th. On the average March was the hottest month and July the coolest. November 2nd with a minimum of 59°F. was the coolest November day on record at Laucala Bay and the coolest at Suva since 1922 when the minimum was 55°F.

4. *Rainfall*—Eight months of the year had rainfall below average while April and November had considerable excesses resulting in near average rainfall for the year. April was the wettest month with 41·88", the second wettest April on record, and June the driest with 0·60". From mid-May to November 5th semi-drought conditions prevailed and the five month period June to October proved to be the driest on record. 13·69" were recorded at Suva and 11·82" at Laucala Bay for the period. The respective departures for the five consecutive months were minus 24·33" and minus 21·97". The previous driest periods (June to October) were 15·27" at Suva in 1905 and 17·66" at Laucala Bay in 1943.

5. *Winds*—The prevailing wind direction was S.E. with 42 per cent frequency and together with Easterlies accounted for 78 per cent of all directions. The mean speed was 8·5 knots and the maximum gust 84 knots on December 2nd.

6. *Hurricanes*—Three tropical storms affected the Group during the year. The first occurred between January 6th and 8th when a hurricane passed through the Lau Group causing widespread damage. The second occurred on April 9th–11th but filled up gradually between Viti Levu and Vanua Levu and did not reach hurricane intensity. Finally a moderate hurricane, which originated near Rotuma, at the end of November, passed over Suva on December 2nd causing slight damage to buildings and considerable damage to crops in the Eastern half of Viti Levu.







